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shallow cicatricose punctures nearly coalescing; propygidium covered with very closely set, fine, very short, somewhat irregular folds on the whole of the median part; pygidium finely plicate transversely and finely scabrose at apex in the female; under side almost glabrous except for a short pubescence on the sides of the metasternum; abdominal segments deeply and closely punctate, process of prosternum strongly carinate and with the apical part sloping, deeply impressed, and glabrous; anterior tibiæ very sharply tri-dentate; joints of anterior tarsi a little thickened, inner claw contorted, broad, bifid at tip in the male; in the female these joints are not very slender, and the two claws are equal.

Length 31–38 mm.; width 15–18 mm.

*Hab.* Cape Colony (Cape Town, Knysna, Port St. John), Natal (Durban).

### Rhizoplatys bituberculatus, Klug,
Plate XL., fig. 32.

Monatsb. Berl. Acad., 1855, p. 657; Peters' Reis., 1862, p. 253.

General appearance of the preceding species, but a little narrower, and with the elytra more finely punctured and the striæ nearly invisible; head as in *R. trituberculatus;* the mandibles are sharply aculeate in the outer angle of the anterior margin and very sharply dentate in the inner, the spine-like tooth being recurved; the cephalic horn is sharper and longer; in the male the prothorax is similarly sculptured, but is a little more ampliate laterally at middle, and it is deeply and broadly excavated from the anterior margin to two-thirds of the length, with the anterior part of the walls of the excavation produced into two conical, very conspicuous tubercles; the posterior part of the disk is slightly impressed in the middle; the female much resembles that of *R. trituberculatus*, but the prothorax is much more deeply and broadly punctured and is even scrobiculate laterally, and there is a distinct impression, callose on each side, in the anterior part of the prothorax; under side as in *R. trituberculatus*, but the four outer spines on the intermediate and posterior tibiæ are not connate at base.

Length 33–35 mm.; width 15–16 mm.

*Hab.* Southern Rhodesia (Victoria Falls), Mozambique (Lourenço-Marquez).

## RHIZOPLATODES, n. gen.

Closely allied to *Rhizoplatys*, but with the shape of the mentum and maxillæ different. Mentum diagonally ampliate laterally from



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the base to a third of the length, emarginate there and slightly attenuate towards the apex where it is very deeply sinuate in the outer angles, and bi-lobate at the apex; it is not very convex in the median part, but is deeply impressed at apex; maxillæ with the upper lobe armed with two sharp teeth bent at right angles, the upper of which is a little concave and placed above the second one which is not hollowed and is set on the inner margin and a little below the first, and below these the inner lobe is produced into a trifid, transverse tooth; palpi and mandibles as in *Rhizoplatys*, but the mandibles are more aculeate and produced at apex into a triangular reflexed tooth.

RHIZOPLATODES CASTANEIPENNIS, Bohem.,

Insect. Caffrar., ii., p. 27.

*Rhizoplatys ambiguus*, Gerst., Deck. Reis., p. 873, p. 105, pl. vii., fig. 2.

Head and prothorax piceous black; elytra either piceous black or chestnut-brown, legs piceous red; head very rugose; clypeus very obliquely attenuate laterally, and with the apical part triangular and reflexed; in the male the posterior part of the head is deeply excavate in the middle, and there is, close to the apex of the clypeus, a conspicuous, vertical tooth, hooked backwards at tip and about 2 mm. long; in the female there is a similar impression, but much more shallow, the dentate apex of the clypeus is prolonged towards the median part in a short, high carina, connected often with a sharp tubercle situated in the centre of the head; prothorax briefly retuse in front in the male, the retuse part being divided nearly into two by a triangular, narrow longitudinal impression which is continued as a deep furrow along the discoidal part as far as the base; in the female the anterior part is not retuse, and the impression is more in the shape of a groove, also continued as far as the base; in both sexes the surface is covered with round punctures a little remote in the posterior part and denser and a little deeper in the anterior and lateral parts; scutellum punctate in the base and centre; elytra elongate, somewhat plane, nearly parallel, declivous at apex, covered with shallow, slightly cicatricose punctures closely set, and with the striæ obliterated; pygidium moderately closely punctate in the male, rugose in the female; abdominal segments with one median row of setigerous punctures, but the apical one is smooth in the centre in the male; this segment is very rugose, and the others closely punctured, as well as having

the transverse row; metasternum, hardly impressed longitudinally; basal intercoxal process of prosternum strongly sloping, triangular, carinate all round and grooved transversely along the lower part.

Length 23–27 mm.; width 11–13 mm.

Boheman evidently saw female examples only, judging from his description, and from his type. The males seem to be much rarer, and I have seen only two examples. There is little doubt that *Rhizoplatis ambiguus*, Gerst., is identical with Boheman's *R. castaneipennis*.

*Hab.* Transvaal (Johannesburg, Potchefstroom, Klerksdorp, Lydenburg). I believe, but am not quite sure, that my male example from Johannesburg was found in a Termite nest.

## Sub-Family RUTELINÆ.

Ligula horny and fused with the mentum, slightly or strongly sloping backwards; labial palpi inserted laterally; maxillæ always robust, or very robust, inner lobe obliterated, but showing faintly in *Isoplia*, upper lobe provided with strong, more or less falcate teeth, with the exception of *Gnatholabis*, mandibles plane, and densely ciliate inwardly, sub-triquetrous, or very convex and triquetrous, and fringed on the base only with short dense ciliæ (*Adoretus*, &c.), projecting slightly or distinctly beyond the labrum which is free, horizontal, sub-horizontal or quite vertical; clypeus simple, not incised; genæ reduced to a mere canthus; eyes large; antennæ eight- to ten-jointed, club tri-jointed not much developed in the African insects, even in the male; scutellum of moderate size in the South African genera, with the exception of *Phænomeris* where it is very elongated; elytra covering the basal part of the propygidium and having or not an epipleural membrane; anterior coxæ transverse, except in *Phænomeris*, and *Isoplia;* mesosternum produced sometimes in a projecting aculeate or carinate process, mesothoracic epimera more or less projecting; legs mostly robust, hind and intermediate tibiæ with two or more oblique rows of short bristles on the outer part, and having two apical spurs; claws of anterior and intermediate tarsi unequal, sub-parallel or very little diverging, the more robust claw mobile, a seta between the two claws; last three spiracles of the abdomen placed on the ventral segment.

Owing to the presence of unequal claws, the stronger of which is hinged, this Sub-Family is connected with the *Hopliinæ*, but is at once distinguished by the presence of two apical spurs on the inter-

mediate and posterior tibiæ instead of one. The claws are equal only in the genus *Phænomeris* where they are also dentate underneath in the four anterior legs in the manner of many MELOLONTHINÆ. With the DYNASTINÆ they are connected by the position of the spiracles which is nearly similar. The form of the punctate striation on the elytra of many species of *Anomala* is somewhat similar to that found in many species of DYNASTINÆ.

Most of the South African RUTELINÆ are nocturnal or crepuscular; only a few are found on flowers in daytime. They remain mostly hidden in the foliage during the day, but I have found some *Adoretus* buried under a thin layer of earth at the foot of trees during the daytime. The specific study of the African species is extremely difficult, with a few exceptions in the genus *Popillia* and kindred genera, and on that account I have found a comparison of the genital armature of the male most useful, not only for discriminating between South African species, but also between those from other African localities.

In South Africa we have two aberrant forms; one has been already mentioned—*i.e.*, *Phænomeris*—but *Isoplia* is perhaps still more abnormal owing to its adaptation to a floral life. In that way it has acquired characters not unlike those found among the *Heterochilus* of the Sub-Family HOPLIINÆ, and, as in many of the latter, the upper lobe of the maxillæ has a pencil of hairs. This is the only instance known to me among the RUTELINÆ.

The South African species and genera are divided into four Tribes.

Labrum vertical, greatly developed, antennæ ten-jointed; mandibles convex, hollowed inwardly, sharply acuminate and falcate at tip, narrowly pubescent along the basal part only of the inner edge; elytra without membranaceous epipleura; antennæ ten-jointed .. ADORETINI.

Labrum nearly horizontal, short, not projecting beyond the clypeus; mandibles plane underneath, not much hooked at the tip, and pubescent along the whole inner edge; elytra with membranaceous epipleura; antennæ nine-jointed; anterior coxæ transverse; mesosternal epimera not projecting; claws of the tarsi often incised except the posterior ones .. .. .. .. .. .. ANOMALINI.

Labrum quite horizontal, continued in a line with the clypeus; mandibles plane; elytra without membranaceous epipleura; antennæ nine-jointed, anterior coxæ longitudinal; mesosternal epimera projecting; all claws simple.. .. .. .. .. .. .. ISOPLIINI.

Labrum horizontal, projecting much beyond the clypeus; mandibles plane; elytra without membranaceous epipleura; antennæ ten-jointed, anterior coxæ longitudinal; mesosternal epimera projecting; claws of the four anterior tarsi with a curved median tooth underneath .. .. .. .. .. .. .. .. .. .. .. .. .. PHŒNOMERINI.

## Tribe ADORETINI.

### Gen. ADORETUS, Casteln.,

Hist. Natur. d. Insect., ii., 1840, p. 142.

Mentum sub-parallel or trapezoidal, deeply incised laterally near the point of insertion of the antennæ which are inserted in the outer face, narrower thence to the apex, the anterior part of which is either nearly straight but plainly incised in the middle, or slopes a little on each side from the broadly and deeply incised median part, convex, but depressed in the anterior part; labial palpi short, the apical one sub-cylindrical; maxillæ robust or moderately robust ending at the tip in two arcuate teeth transversally set, the first tooth is disconnected from the second and is more slender, the other one is either bifid, or trifid, but sometimes the three teeth are only slightly connate at the base, maxillary palpi long, apical joint sub-fusiform, not quite as long as the two preceding taken together, or only a little longer than the penultimate one, and obsoletely impressed laterally; labrum vertical, obliquely attenuate laterally, or triangular; crenulate, mandibles swollen at the base, hollowed inwardly, curved and acute at the tip, and sometimes serrate inwardly; clypeus declivous in front, edged with a fine, more or less raised margin, either semicircular, rounded in front only, or occasionally sub-truncate, or sub-truncate but emarginate in the middle, shorter and separated from the head by a transverse impressed line, head and clypeus plainly scabrose; eyes very large, bulging, divided above the median part by the canthus of the genæ for a third of the length; antennæ short, slender, ten-jointed, club as long as the five preceding joints taken together; prothorax twice as broad as long, very little sinuate in front, but more distinctly so along the base the angles of which are somewhat rounded, sides also rounded in the middle and fringed there with bristly hairs; scutellum as long as broad at the base, ogival, but not very sharply acuminate; elytra hardly wider at the base than that of the prothorax, slightly ampliate thence for about one-sixth of the length, then sinuate, and a little more ampliated from there to the rounded apical part, they have on each side a distinct stria along the suture and usually four, more or less raised, costules usually with a somewhat regular series of punctures on each side of them; the propygidium is partly hidden by the elytra, the propygidium is somewhat convex in the middle, and vertical; anterior tibiæ tri-dentate outwardly, basal tooth very short, inner spur long and slender; intermediate and posterior tibiæ with two transverse rows of bristles not always very distinct on the outer

sides; tarsi somewhat short and robust, posterior ones not longer than the hind tibiæ; claws unequal, parallel, inner one of the anterior tarsi and outer one of the intermediate ones cleft at the tip; each coxæ produced behind at the base in a more or less long, but nearly always very distinct lobate process; mesosternum not projecting in front.

The species are usually covered with short, appressed hairs, at times somewhat squamiform, but never dense enough to hide completely the teguments; several species have series of remote, upright hairs on the elytra, and the lateral margins have a fringe of bristly ones always longer in the anterior part. They are found on trees and are crepuscular. Near Kimberley I found many examples hidden a few inches under the surface of the ground, at the foot of the trees dotting the landscape. The genus has a wide range. It is represented in the whole of Africa, in Madagascar, Arabia, India, China, Java, Manilla, &c., and there is also one species in Southern Russia. The African species are very much alike, but all those I know can be somewhat easily recognised by the shape of the genital armature of the male.

### *Key to the Species.*

A⁵. Clypeus regularly rounded from eye to eye in both sexes.

B². Trochanters of hind legs spinose in the male.

Chestnut-brown, covered with dense greyish hairs. Suture of the clypeus with the head very plain, scutellum closely punctured, hind trochanters produced into a very long spine (pl. li., fig. 1) .. .. .. .. .. .. .. .. *capicola.*

Suture of the clypeus hardly distinct; scutellum with only a few punctures, hind trochanters produced into a short spine (pl. li., fig. 2) .. .. .. .. .. .. .. .. .. *fallaciosus.*

B¹. Trochanters of male not spinose.

*a*³. Elytra not distinctly costulate.

Chestnut-red, clothed with white concolorous hairs; (pl. li., fig. 3) .. .. .. .. .. .. .. .. .. *incongruens.* *illitus.*

Fuscous brown, densely clothed with white scale-like hairs, and having on each side four rows of granules bearing each a white bristle (pl. li., fig. 4) .. .. .. *punctipennis*

Fuscous with the elytra dark chestnut-brown, sparingly clothed with greyish hairs; clypeus very elongate(pl. li., fig. 6) .. .. .. .. .. .. .. .. .. .. .. *salisburiensis.*

*a*². Elytra with only one distinct costule on each side.

Dark chestnut-brown; prothorax with three conspicuous bands of white scales, scutellum clothed with similar scales (pl. li., fi . 5) .. .. .. .. .. .. *hoplioides.*

$a^1$. Elytra distinctly costate.

Body very pale testaceous, basal part of the head and the suture fuscous or black; punctures on the prothorax and elytra moderately closely set, shallow (pl. li., fig. 7) .. .. .. .. .. .. .. .. .. *ictericus.*

Body very pale testaceous, concolorous, punctures on the prothorax and elytra very closely set and deep (pl. li., fig. 8) .. .. .. .. .. .. .. .. .. *ovampoensis.*

Body testaceous but with the head, two broad patches on the prothorax, the intervals on the elytra and also the outer margin somewhat darker than the background; prothorax sub-foveolate; punctures on the first interval of elytra very rugose, costæ very distinct (pl. li., fig. 9) .. .. .. .. .. .. .. .. .. *fusculus.*

Head, prothorax, and scutellum brick-red; elytra chestnut-brown, costulate, very coriaceous (pl. li., fig. 10) .. .. .. .. .. .. .. .. .. .. *mashunus.*

$A^4$. Clypeus sub-parallel laterally, sub-arcuate or arcuate in front.

$a^2$. Elytra not costulate.

Fuscous with the clypeus, sides of prothorax, scutellum and elytra chestnut-brown, clothed with squamiform white hairs forming three longitudinal bands on the prothorax and two more or less distinct rows of interrupted white patches on each elytron (pl. li., fig. 11) .. .. .. .. .. .. .. *variegatus.*

$a^1$. Elytra slightly costulate.

Fuscous brown, clothed with very dense greyish hairs; elytra, each with four rows of remote impressions bearing a fulvous bristle (pl. li., fig. 12) .. .. .. .. .. .. *laticeps.*

Brick-red, clothed with greyish hairs; each elytron with the costæ slightly interrupted regularly by a transverse raised line (pl. li., fig. 13) .. .. .. .. .. .. .. *fraudulentus.*

Fuscous brown on the upper side, elytra each with four light testaceous costules; prothorax and elytra clothed with long, greyish appressed hairs .. .. .. .. .. .. .. *nconditus.*

Testaceous red, clothed with dense, sub-squamiform hairs; elytra covered with closely set cicatricose punctures (pl. li., fig. 14) .. .. .. .. .. .. .. .. .. .. .. .. .. *zambesianus.*

Testaceous, with the head, two very wide patches on the prothorax and the suture infuscate:

Clypeus short, plainly arcuate (pl. li., fig. 15) .. .. *impurus.*
Clypeus short, very little arcuate (pl. li., fig. 16) .. *exasperans.*
Clypeus long, plainly arcuate (pl. li., fig. 17) .. .. *fraudator.*

Testaceous, head brownish, closely scabrose from apex to base, prothorax with a small, median impression; elytral costæ very distinct .. .. .. .. .. .. .. .. .. *latiusculus.*

Testaceous, slightly metallic, but darker in the median part of the head, prothorax and dorsal part of the elytra, the costæ of which are interrupted at regular intervals by a darker patch (pl. li., fig. 18) .. .. .. .. .. .. .. *dissidens.*

A³. Clypeus arcuate in front and emarginate in the centre in the male only.

Testaceous brown, with the head and two broad discoidal patches on the prothorax sub-infuscate; elytra with the costæ very plain, and the punctures very deep and conspicuously rugose (pl. li., fig. 19) .. .. .. .. .. .. .. .. .. *cribrosus.*

Brown, somewhat infuscate on the dorsal part of the elytra, sub-metallic, elytra densely hairy, each costa with a tesselate row of denser hairy patches (pl. li., fig. 20) .. .. .. .. .. .. *tessullatus.*

Pale testaceous, with the hind part of the head only infuscate, hind tibiæ fusco-ferruginous; costules moderately raised (pl. li., fig. 21).. .. .. .. .. .. .. .. .. .. .. .. .. *bechuanus.*

Pale testaceous, with the head, two patches on the prothorax, and the suture and hind tarsi infuscate (pl. li., fig. 22) .. .. *picticollis.*

A². Clypeus arcuate in front and emarginate in both sexes.

Dark fuscous, with the sides of the prothorax and legs reddish brown, somewhat metallic; prothorax with a median sulcus; clypeus of the female distinctly rounded laterally towards the anterior part (pl. li., fig. 23) .. .. .. .. .. .. .. .. *inglorius.*

Fuscous brown, darker and more metallic in the centre of the prothorax and the discoidal part of the elytra; prothorax without a median sulcus; clypeus of the female distinctly sinuate laterally towards the anterior part.. .. .. .. .. .. .. .. .. *picinus.*

A¹. Clypeus truncate in front in the male, arcuate in the female.

Elytra costate.

Pale testaceous, with the posterior part of the head infuscate, upper side with long but much spaced flavescent hairs (pl. li., fig. 24).. .. .. .. .. .. .. .. .. .. .. .. .. *flaveolus.*

ADORETUS CAPICOLA, Burm.,
Plate XLI., fig. 1.
Handb. d. Entom., iv., i., p. 472 ♀.

*A. testaceus*, Fähr., Ins. Caffr., ii., p. 70 ♂.

Rusty red, with the legs somewhat testaceous red, and the tarsi darker; whole upper side covered with minute appressed greyish hairs equally dense everywhere, elytra with four nearly evanescent costules which, like the suture, bear a series of remote very short erect white hairs; head very closely punctured, clypeus quite semicircular; prothorax as closely punctured as the head, and

having a slight metallic tinge, and no trace whatever of a median groove or impression ; elytra not broader at the base than the prothorax, a little ampliate laterally from about one-fourth of the length and only slightly narrowed in the posterior part, not very convex, strongly callose on each side above the apical part, and covered with closely set, almost contiguous, somewhat wide punctures, imparting to them a coriaceous appearance, but hidden, however, to a great extent by the appressed hairs ; the pygidium and under side are covered with hairs similar to those on the upper side in texture and colour, but somewhat longer. In the male the hind trochanters are produced into a very long, acute spine ; the genital armature is elongate, sub-parallel, obliquely narrowed outwardly at apex and deeply emarginate in the centre.

Length 11–12 mm. ; width 6–6½ mm.

*Hab.* Natal (Durban), Cape Colony (Uitenhage), Port St. John.

Burmeister's description was made from a female example.

### Adoretus incongruens, n. spec.

Plate XLI., fig. 3.

The description of *A. testaceus* applies almost entirely to this species, which is, however, a little smaller, and has no slight metallic tinge on the prothorax ; the elytra have also the evanescent costules, and are somewhat metallic in the intervals ; but whereas it is difficult to recognise the female from that of *A. testaceus*, the male differs owing to spine of the hind trochanters being very short ; the shape of the genital armature is very different ; the sheath is open on the upper side for two-thirds of the length only, and instead of being nearly parallel and only very slightly ampliate at the apex, it broadens triangularly from the median part, is broadly and deeply incised in the middle at the tip, and the two lobes are obliquely truncate.

Length 10–11½ mm. ; width 5½–6 mm.

*Hab.* Southern Rhodesia (Salisbury).

### Adoretus fallaciosus, n. spec.

Plate XLI., fig. 2.

The male of this species is hardly to be distinguished from *A. incongruens* in colour and general facies, but it is redder and has no metallic tinge on the elytra which are not more plainly costulate, but the punctures of which are a little shallower, and the whitish appressed pubescence is denser ; the suture of the clypeus is hardly

distinct, and the scutellum is a little shorter and has only a few punctures; the most distinctive character is found in the shape of the genital sheath, which is open entirely on the upper side, narrowed towards the apex where it is deeply but somewhat narrowly incised, and with the two lobes parallel and vertical. The spine of the hind trochanters is short.

Female unknown.

Length 10 mm.; width $5\frac{1}{2}$ mm.

*Hab.* British Bechuanaland (Kanye).

ADORETUS ILLITUS, n. spec.

Female : Chestnut-brown with a distinct metallic tinge, clothed on the upper side with short and very dense squamulose whitish-grey hairs, hiding the background ; the head and clypeus are normally scabrose and the suture is indistinct; the prothorax is very closely punctured and has no median impression; the scutellum is very finely punctulate, and the elytra are not costulate, and are covered with very small and very closely set punctures which are not scar-like, except along the outer margins.

This species, which in general appearance resembles *A. fallaciosus*, is distinguished from it by the finer and denser non-cicatricose punctures on the elytra, which are also non-costulate.

The male is unknown to me.

Length 9 mm. ; width $5\frac{1}{4}$ mm.

*Hab.* Natal (Durban).

ADORETUS PUNCTIPENNIS, Fähr.,

Plate XLI., fig. 4.

Insect Caffr., ii., p. 67.

Closely allied to *A. testaceus ;* the shape of the head, prothorax, and elytra is the same, but the contiguous punctures on the head are slightly more scabrose, and the suture between the head and the clypeus is less carinate; the series of white, sub-erect, short hairs on the elytra are plainer, but there is no costule, and in front of each remote white hair there is a very small denuded round spot, which, in the anterior part, is faintly granular; the greyish-white hairs are also denser and in fresh examples hide the ferruginous colour; the under side and legs are clothed with appressed hairs similar in texture to those of the upper part, but slightly longer, and on the pygidium there is a narrow denuded longitudinal median line. In the male the hind trochanters are simple, and the genital armature

a little broader than in *A. testaceus*, nearly parallel, much more obliquely truncate laterally at the tip, and more broadly emarginate in the centre.

Length 13–14 mm.; width 7–7¼ mm.

*Hab.* Natal (Durban), Mozambique (Lourenço-Marquez, Amatongaland), Transvaal (Rustenburg), Southern Rhodesia (Zambesi River).

ADORETUS HOPLIOIDES, Bohem.,*

Plate XLI., fig. 5.

Insect. Caffrar., ii., p. 148.

Upper side chestnut-red, moderately shining and without any metallic sheen; under side fuscous except on the sides, legs reddish brown, tarsi piceous; clypeus semicircular, finely granulose like the greatest part of the head, and covered with squamose white hairs shorter than those clothing entirely the head; the prothorax is attenuated laterally in the anterior part, as far as the middle, and thence nearly straight, covered with nearly contiguous punctures, clothed with squamose white hairs and having three very plain longitudinal bands of white scales, a median and a supra-marginal on each side; scutellum densely scaly; elytra covered with nearly contiguous cicatricose punctures, from each of which springs white squamose hairs, there is only one not very distinct costa reaching the apical callus which is moderately developed, but in addition four rows of distant, very short bristles, having each in front a somewhat conspicuous lanceolate white scale; pygidium and legs clothed with white hairs, sides of abdomen and pectus with white scales.

Length 9½–10½ mm.; width 5–5¾ mm.

*Hab.* Southern Rhodesia (Buluwayo, Enkeldoorn, Sebakwe); Natal (Durban).

This species is a very distinct one, owing to the three bands of white scales on the prothorax, and the white scaly scutellum.

ADORETUS SALISBURIENSIS, n. spec.,

Plate XLI., fig. 6.

Black, with the elytra ferruginous brown; head covered with irregular, non-scabrose punctures, clypeus parabolic, a little more elongate in the centre than in the other South African species, and

* The generic name of this species, and also of *A. variegatus*, has been erroneously printed *Eriesthis* in Boheman's "Insecta Caffrariæ."

with the margins much reflexed, it is not distinctly scabrose, the suture is obliterated, and the whole head is clothed with white, not dense, appressed hairs ; prothorax covered with somewhat round punctures in the discoidal part, and very irregular ones on the sides, the clothing of white appressed hairs is scanty; scutellum clothed with somewhat dense white hairs ; elytra not costulate, covered with deep, round, closely set punctures with irregular, slightly raised intervals imparting a strongly coriaceous appearance, from each puncture springs a minute greyish-white, non-squamulose hair, and there are on each side four rows of distant, very short, white bristles, which are, however, seldom distinctly seen ; the hairs of the pygidium are long, and those on the under side somewhat scanty ; the legs are black and clothed with white hairs; the inner anterior claws are more deeply cleft than in the other species.

Female unknown.

Length $8\frac{1}{2}$ mm. ; width 4 mm.

*Hab.* Southern Rhodesia (Salisbury).

ADORETUS ICTERICUS, Burm.,
Plate XLI., fig. 7.
Handb. d. Entomol., iv., 1, p. 469.

*A. nigriceps*, Fähr., Insect. Caffr., ii., p. 74.

Testaceous or very pale testaceous, and without any metallic reflection, but having along the base of the head a black band which is prolonged along the eyes, the tarsi are reddish brown or piceous red ; head broadly punctured, clypeus scabroso-punctate, and both clothed with scattered small greyish appressed hairs, the suture is very distinct ; prothorax covered with not closely set, round, shallow punctures a little more cicatricose on the sides than on the disk, each bearing a very short, appressed, non-squamose greyish-white hair quite similar in shape and size to those of the elytra; scutellum sharply triangular, somewhat plainly costulate, deeply and closely punctured but not coriaceous owing to the intervals between the punctures not being much raised or sinuated, each puncture bears a thin and short appressed hair not set closely enough to form anything like a distinct clothing ; pygidium with long hairs ; under side somewhat sparingly clothed with appressed greyish hairs longer than those of the upper part. In the male the sheath of the genital organ is open for three-fourths of the length, parallel for three-fourths of the length and thence slightly ampliated, broadly and semicircularly incised in the middle at apex, with the two lobes somewhat diverging and acuminate at the tip.

Length 12–12½ mm. ; width 6–6½ mm.

*Hab.* Cape Colony (Port Elizabeth, Port St. John, Uitenhage), Transvaal (Potchefstroom, Lydenburg).

### Adoretus ovampoensis, n. spec.,

Plate XLI., fig. 8.

Similar in shape, size, and colour to *A. ictericus*, but there is no basal transverse fuscous band on the head, the suture is not fuscous, the punctures are closer, deeper, and the pubescence is denser; the hind tarsi are infuscate; the shape of the genital armature is very different from that of *A. ictericus;* it is completely open on the upper side, very declivous, narrowed towards the apex and produced there on each side into a bifid tooth set almost at right angles.

Length 12–13 mm.; width 6¼ mm.

*Hab.* Ovampoland (Evari River).

### Adoretus fusculus, Fähr.,

Plate XLI., fig. 9.

Insect. Caffrar., ii., p. 77.

This species is so closely allied to *A. cribrosus* that it might be confused with it. The two fuscous patches on the prothorax are, however, more distinct, the elytra are also browner, noticeably on the sides, and the punctures, especially in the first interval, are more rugose than in *A. cribrosus*, but those of the prothorax are broader and less closely set; the sheath of the male armature is also entirely open on the upper side, but gradually and sharply acuminated from past the middle to the apex where it is finely and not deeply incised; and the clypeus in the male is rounded and not emarginate as in *A. cribrosus* ♂.

Length 9 mm.; width 5 mm.

*Hab.* British Bechuanaland (Kanye).

### Adroetus mashunus, n. spec.,

Plate XLI., fig. 10.

Head and prothorax brick-red, elytra chestnut-brown, legs and under side testaceous; clypeus parabolic, but slightly oblique laterally at the base, scabrose, head scabroso-punctate, and both clothed with some small appressed white hairs; prothorax somewhat plainly ampliated and rounded in the median lateral part, covered with

closely set, rugulose punctures, which are less numerous in the median part of the disk, from each puncture springs a minute greyish appressed hair; scutellum brick-red; elytra not conspicuously costulate, and covered with very small and very dense punctures a little smaller and less closely set than those of the prothorax and giving them a very coriaceous appearance, the whitish pubescence is denser owing to the greater number of punctures, and I cannot find any traces of the four series of small bristles ; the pubescence on the pygidium, under side, and legs is somewhat dense; the inner claw of the anterior legs is deeply cleft at the apex ; the sheath of the genital armature of the male is open on the upper side, very declivous from the median part, and suddenly narrowed thence into two long, narrow forcipate lobes separated by a narrow incision.

Length 9 mm.; width 5–5¼ mm.

*Hab.* Southern Rhodesia (Salisbury, Sebakwe).

ADORETUS VARIEGATUS, Bohem.,
Plate XLI., fig. 11.
Insect. Caffrar., ii., p. 113.

*A. melanoleucus*, Péring., Trans. Entom. Soc. Lond., 1896, p. 161.

*A. decoratus*, Arrow, Ann. and Mag. Nat. Hist., 1899, vol. iv., p. 121.

Chestnut-brown on the upper side, but with the head, the median part of the prothorax, and on the elytra a dorsal series of patches and a supra-marginal broad band æneo-fuscous, covered with white squamiform appressed hairs forming on the prothorax three somewhat plain longitudinal lines; on the elytra the scale-like appressed hairs are shorter than on the prothorax, and form on the dorsal part a regular series of transverse white patches alternating with fusco-æneous transverse, glabrous ones, and there are also two or three more white patches in the posterior supra-lateral part; the under side and hind tibiæ are plainly fuscous ; clypeus broader than long, straight laterally, plainly arcuate in front; prothorax covered with somewhat deep setigerous punctures, more abundant and more closely set on the sides ; scutellum densely scaly ; elytra not costulate, covered with deep, round, setigerous punctures; in shape the genital armature resembles very much that of *A. capicola*, but it is not quite so robust, but more parallel laterally and more sinuate on each side at the apex.

Length 8½–8¾ mm. ; width 4½ mm.

*Hab.* Southern Rhodesia (Buluwayo, Enkeldoorn, Sebakwe).

ADORETUS LATICEPS, Fähr.,
Plate XLI., fig. 12.
Insect. Caffrar., ii., p. 69.

Ferruginous, with a very slight metallic tinge on the head and prothorax, and clothed with a very dense greyish white pubescence; the head is very scabroso-punctate, the clypeus is still more scabrose, parabolic in the male, quite semicircular in the female, with the margin plainly reflexed; the prothorax is very closely punctured, but the punctures are shallow; there is no median impression or furrow; the elytra are finely coriaceous, somewhat depressed, plainly callose on each side at the apex, not costulate, but having on each side four rows of distant, inconspicuous round impressions, bearing a fulvous, moderately long bristle. The genital armature of the male is less declivous than that of *A. testaceus*, more parallel, incised at apex with each lobe obliquely truncate on each side.

Length 10–11½ mm.; width 5½–5¾ mm.

*Hab.* Cape Colony (Griqualand West), Southern Rhodesia (Upper Limpopo).

ADORETUS FRAUDULENTUS, n. spec.,
Plate XLI., fig. 13.

Head and prothorax reddish brown, elytra testaceous red, under side and legs testaceous, metallic sheen almost indistinct; clypeus and head very scabrose, and clothed with greyish appressed hairs, clypeus rounded in front, but straight laterally; prothorax not much attenuate laterally in front, and covered with punctures which on the sides and in front are very closely set and scabrose, but a little less so in the median part of the disk, from each puncture issues a small greyish white appressed hair; elytra somewhat plainly costulate with the intervals very closely punctured, and as each puncture bears an appressed hair, these hairs form a somewhat dense coating; tarsi reddish brown; the outer claw of the hind legs is so small as to be difficult of detection; in shape the sheath of the genital armature resembles a little that of a *A. ictericus*, but it is more sinuated laterally on the upper side, less incurved, plainly tri-dentate at the apex.

Length 11½ mm.; width 6 mm.

*Hab.* ? Southern Rhodesia.

ADORETUS INCONDITUS, n. spec.

Female: Head and basal part of clypeus, median part of prothorax and elytra fuscous brown, the latter have four distinct testaceous

costules on each side, the sides of the prothorax, legs, and the under side are testaceous; clypeus and frontal part of the head very closely scabroso-punctate and covered with dense fulvous appressed hairs similar to those covering the prothorax and elytra, the latter is very finely, deeply, and closely punctured, and the appressed hairs are longer than in the other South African species; scutellum somewhat testaceous, hairy, and very closely punctate; elytra covered with cicatricose closely set punctures from each of which springs an appressed hair, which is set more close to each other on the four costules on each side than on the intervals; under side and legs clothed with greyish hairs similar to, but less dense than, those on the upper side.

Length 13 mm.; width 6 mm.

*Hab.* Cape Colony (Bedford).

### Adoretus zambesianus, n. spec.,
### Plate XLI., fig. 14.

Light brick-red, shiny but without a metallic tinge, clothed on the upper surface with very short appressed greyish white hairs, set somewhat close to each other, the under surface and legs are clothed with longer and less squamose white hairs; head normally scabroso-punctate, clypeus semicircular, suture distinct, the hairs on the head and prothorax are plainly squamose, thicker and longer than those on the elytra; prothorax very short, covered with somewhat irregular non-contiguous punctures; scutellum covered with the same whitish hairs as on the elytra which are plainly quadri-costate on each side, with the intervals and the costæ themselves filled and covered respectively with contiguous cicatricose punctures, the apical callus is not greatly developed; the abdomen and the pectus are somewhat infuscate. The genital armature differs from that of all the other species, the sheath is open only at the apical part, which is very declivous and tapering, narrowly incised in the middle, with the two lobes narrow, but slightly rounded outwardly.

Length 7–8 mm.; width 4–5 mm.

*Hab.* Southern Rhodesia (Victoria Falls, between the Zambesi and the Limpopo Rivers).

### Adoretus impurus, Fähr.,
### Plate XLI., fig. 15.
### Insect. Caffrar., ii., p. 71.

Pale testaceous, somewhat shining but without a metallic tinge, the head is fuscous, and on the prothorax are two discoidal fuscous

patches separated by a narrow testaceous band, the suture is faintly fuscous, the whole surface of the body is covered with fine appressed not squamose hairs; the head is granulose, the clypeus is slightly oblique laterally at base and rounded in front in the male, quite semicircular with the margin plainly reflexed in the female, the punctures on the prothorax are deep, broad, somewhat closely set, the elytra are faintly costulate, and the intervals deeply and very closely punctured; the sheath of the genital armature of the male is open on the upper side, elongate, moderately declivous, bi-sinuate laterally, narrowing towards the apex where it is incised in the centre with the sides very obliquely narrowed.

Length 10–11½ mm.; 5–6 mm.

*Hab.* Transvaal (Johannesburg).

ADORETUS EXASPERANS, n. spec.

Plate XLI., fig. 16.

In colour, shape, size, and sculpture this species is so very much like *A. impurus* that it is most likely to be confused with it unless the difference in shape of the genital armature of the male is noticed. The sheath is equally long, and also bi-sinuate laterally, but it is a little more deeply incised in the middle at the apex and sharply dentate laterally.

Length 11 mm.; width 5¾ mm.

*Hab.* Cape Colony (Fort Beaufort).

ADORETUS FRAUDATOR, n. spec.

Plate XLI., fig. 17.

Colour, shape, and size of the two preceding species, but the prothorax has no discoidal infuscate patch, the clypeus is more rounded at the apex, the punctures on the elytra are a little broader, and the suture is hardly infuscate; the club of the antennæ is much more elongate, being nearly as long as all the joints taken together, and the shape of the genital armature differs considerably; it is open on the upper side and suddenly very sharply acuminate from about the median part to the apex where it is narrowly incised, somewhat in the manner of *A. mashunus*, but it is less declivous.

Length 10½ mm.; width 5 mm.

*Hab.* Natal (Eshowe).

ADORETUS LATIUSCULUS, n. spec.,

Female: Testaceous without any metallic sheen, head, median part of the prothorax and shoulders somewhat infuscate; clypeus half as

long in the centre as wide, very parabolic, very scabrose, head more closely scabroso-punctate than the clypeus, both with a very short appressed pubescence partly obliterated in my example; prothorax not much attenuated laterally in front, covered with closely set punctures separated from each other by a space corresponding to half their diameter, and having in the median part of the disk a transverse lozenge-shaped shallow impression; scutellum punctulate; elytra not quite as broad at the base as the base of the prothorax, but much more so towards the apical part, plainly costulate, the costæ are impunctate but the intervals are filled with closely set but not contiguous, moderately regular punctures; the four series of bristles cannot be detected in my example which is a female, the carina of the epipleural fold is deeply punctured at remote intervals; the larger anterior claw is deeply cleft at the apex, and the inner claw of the hind legs is very small, but distinct.

Length 12½ mm.; width 6½ mm.

*Hab.* Transvaal (Barberton).

ADORETUS DISSIDENS, n. spec.,
Plate XLI., fig. 18.

Testaceous, but somewhat infuscate on the upper side, and with a slight metallic sheen more noticeable on the head and prothorax; head and clypeus granuloso-punctate, the former is nearly straight laterally at the base and parabolic in front; the punctures of the prothorax are small, but very closely set, especially on the sides, and there is a slight median longitudinal impression, the small, white appressed hairs clothing the head and prothorax are only moderately dense; the elytra are distinctly costate, the costæ are lighter than the rest of the background, but are interrupted at regular intervals by a fuscous patch which imparts to them a tesselated appearance, the intervals are filled with somewhat irregular, closely set, moderately deep punctures, the greyish appressed pubescence is somewhat dense; the hind legs and all the tarsi are ferruginous; the sheath of the genital armature of the male is entirely open on the upper side, parallel, straight transversely at the tip but slightly attenuate obliquely laterally.

Length 10 mm.; width 5½ mm.

*Hab.* Natal (Estcourt).

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ADORETUS SEBAKUENSIS, n. spec., pl. xliii., fig. 29.

Pale testaceous, the head is a little infuscate, the whole body, except the legs, is covered with a coating of white squamose hairs hiding the background; the hind tarsi are fuscous; the clypeus of the male is much more parallel than in any of the other South African species and quite transverse in front, but in the female it is plainly arcuate; the prothorax and elytra are very closely punctured, but the punctures are hidden by the vestiture, the elytra are very obsoletely tri-costate on each side, and the apical part of the pygidium has no squamose hairs. In general appearance it is not unlike *A. capicola*, but is easily recognised by the shape of the head, the absence of spinose trochanters in the male, the less distinctly costulate elytra, and the denser and whiter coating of squamose hairs; the shape of the

ADORETUS FLAVEOLUS, Fähr.,
Plate XLI., fig. 24.
Insect. Caffr., ii., p. 75.

Very closely allied to *A. exasperans* and *A. fraudator*, especially to the latter, the colour is the same, but the clypeus is nearly straight at the apex in the ♂ with the angles rounded, the punctures on the prothorax are more shallow, the costules on the elytra are a little less noticeable; the colour of the body is pale testaceous, with the head somewhat infuscate in the posterior part, the suture is hardly darker than the background of the elytra, and the tarsi are brownish; in shape the clypeus resembles that of *A. exasperans* and *A. impurus*, but it is transversely straighter at the apex, and the shape of the genital armature of the male differs from both, being broader, shorter, more ovately open on the upper side, abruptly acuminate near the apex, and narrowly cleft there.

Length 9–9½ mm.; width 4¾–5¼ mm.

*Hab.* Southern Rhodesia (Salisbury, Sebakwe).

ADORETUS CRIBROSUS, Har.,
Plate XLI., fig. 19.
Coleopt., Heft. v., 1869, p. 124.

*A. cribratus*, Blanch., Cat. Coll. Entom., 1850, p. 234.

Testaceous brown, very faintly metallic, head fuscous, median part of prothorax sometimes slightly infuscate in the discoidal part; clypeus semicircular, scabroso-punctate, separated from the head by a very distinct carina, head moderately closely punctate, and with a somewhat more distinct metallic sheen, each puncture bears a small whitish appressed hair; prothorax covered with closely set but not contiguous, and somewhat irregular, small, deep punctures emitting each a very fine whitish appressed hair; scutellum closely punctured; elytra very plainly costate, the costæ smooth and impunctate and having each a series of very distant, short white bristles, the intervals are filled with irregular, deep, nearly contiguous punctures separated by raised, sinuose walls, the suture is raised, they are not strongly callose at the apex, and each puncture bears a very minute greyish-white hair; the pygidium, under side, and legs are somewhat thinly clothed with greyish appressed hairs; all the tarsi are reddish brown; the sheath of the genital armature is entirely open on the upper side, not very declivous, sinuate, deeply emarginate laterally, at a short distance from the apex, very slightly incised at the middle, the inner angle

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genital armature is different from that of both *A. capicola* and *A. punctipennis*. Length 13 mm.; width 6½ mm.

*Hab.* Southern Rhodesia (Sebakwe).

ADORETUS SIMPLEX, n. spec., pl. xliii., fig. 30.

Shape, size, and sculpture of *A. impurus*, but the colour is a little darker, and the coating of squamulose hairs is a little denser, the clypeus of the male is plainly truncate instead of being arcuate, as in *A. impurus*, and is therefore more like that of *A. exasperans*, but it is even straighter than in this last-named species, and the genital armature is very different in shape from that of any of the other South African species. Length 10½ mm.; width 5 mm.

*Hab.* Southern Rhodesia (Sebakwe).

of the incised part projecting in the shape of a minute tooth, the outer angle sharp.

Length 10½–12 mm.; width 5¼–5½ mm.

*Hab.* Natal (Durban, Maritzburg, Harding, Frere).

ADORETUS TESSULATUS, Burm.,
Plate XLI., fig. 20.
Handb. d. Entomol., iv., 2, p. 529.

*A. maculatus*, Fähr., Insect. Caffr., ii., p. 68.

Fuscous brown on the upper side, with the clypeus, the sides of the prothorax and the elytra lighter brown, under side and legs testaceous red, hind legs somewhat infuscate; clypeus straight laterally at the base, rounded thence but distinctly emarginate in the centre in the male, but not in the female, the suture with the head is slender but distinct, and both the head and clypeus are scabrose and covered with dense greyish hairs; prothorax also clothed with dense appressed hairs, it is very closely punctured, and has a metallic sheen; elytra plainly tri-costulate on each side, deeply punctured and clothed with fine, short, very closely set appressed hairs, the three costæ of the elytra are regularly hairy but have a tesselate appearance owing to the hairs being interrupted at regular intervals by denuded, transverse patches; the sheath of the genital armature of the male is entirely open on the upper side, slightly sinuate laterally but sub-parallel for the greater part of the length and obliquely truncate on each side towards the apex which is not deeply emarginate and is not cleft.

This species is very closely allied to *A. obscurus* from Senegambia. The shape of the head and vestiture are identical, but the sheath of the genital armature is not so obliquely truncate laterally and is broader at the apex.

Length 9–11 mm.; width 5–6 mm.

*Hab.* Cape Colony (Namaqualand, Griqualand West), Orange River Colony (Bothaville), Natal (Estcourt), Damaraland, Transvaal (Potchefstroom, Rustenburg).

ADORETUS BECHUANUS, n. spec.,
Plate XLI., fig. 21.

Pale testaceous, with the head and the hind tibiæ fuscous black, clothed with greyish moderately dense greyish hairs; closely allied to *A. fraudulentus* and to *A. flavcolus*, but differs from the former in having the clypeus more truncate in front, and from the second in it

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ADORETUS DISPARILIS, n. spec., pl. xliii., fig. 31.

Pale testaceous, slightly metallic, and covered on the upper and under sides and also on the legs with somewhat long and very dense squamulose, appressed, flavescent hairs, so closely set on the scutellum as to hide the whole surface; the clypeus is rounded laterally and truncate in the anterior part in the male, sub-acuminate there in the female, in which the median lateral part of the prothorax is also slightly more ampliate than in the male; the elytra are plainly costate; the joints of the tarsi are very short, but the apical one is long and very robust in the male, and in both sexes the apical outer tooth of the anterior tibiæ is a little shorter than in the intermediate. The genital armature differs much from that of the other South African species. Length 9–9½ mm.; width 4½–4¾ mm.

*Hab.* Southern Rhodesia (Sebakwe).

being plainly sinuate in the middle of the anterior part, the punctures on the prothorax are equally distant, but more shallow and less broad than in *A. fraudulentus*, and the scutellum is more sharply acuminate at the apex; the elytra are somewhat distinctly costulate, and the pubescence is slightly denser; the valves of the genital armature although of somewhat the same shape as in *A. fusculus*, are more robust, more widely open on the upper side from base to apex.

Length 10½ mm.; width 5 mm.

*Hab.* British Bechuanaland (Ramoutsa).

ADORETUS PICTICOLLIS, Fähr.,
Plate XLI., fig. 22.
Insect. Caffr., ii., p. 74.

Colour, shape, and size of *A. impurus;* distinguished from it mainly by the shape of the clypeus and of the valves of the genital armature; the clypeus instead of being rounded in front is straight, then broadly rounded till the median anterior part where it is distinctly emarginate; the sculpture of the head, prothorax, and elytra does not differ also from that of *A. impurus;* the suture of the elytra is more broadly or more plainly infuscate, and the infuscate patch on the prothorax is conspicuous; the valves of the genital armature instead of being narrow and tapering towards the apex and not much retuse, are sub-vertical bi-partite from base to tip, the two parts are a little more broadly separated on the upper than on the under side, symmetrical, parallel, truncate at the apex and with the outer angles slightly spinose. The female cannot be distinguished from that of *A. impurus* and *A. exasperans*.

Length 10–11 mm.; width 4¾–5½ mm.

*Hab.* Transvaal (Johannesburg, Lydenburg), Orange River Colony (Bothaville).

ADORETUS INGLORIUS, n. spec.,
Plate XLI., fig. 23.

Pale testaceous, with the head infuscate and the suture of the elytra slightly darker than the background (? immature) or fuscous-brown with a slight metallic tinge and with the sides of the prothorax broadly testaceous; legs testaceous with the anterior ones slightly rusty red; clypeus broadly rounded laterally, but not from the base, plainly emarginate in the centre of the anterior part, and

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ADORETUS SIMULANS, n. spec., pl. xliii., fig. 32.

Almost similar to *A. tessulatus*, Burm.; the vestiture is identical, and on the elytra the three tessellate rows on each side are alike; the female has the clypeus also arcuate in front, but it is a little longer and more regularly curved from the base, that of the male is nearly transverse and plainly emarginate in front, but not incised as in the same sex of *A. tessulatus*. The shape of the genital armature is quite different from that of the latter, and closely resembles that of *A. separabilis*, a very distinct species, but the opening is much more ovate, and the apical incision is broader, deeper, and its apical angles sharper. Length 10–11 mm.; width 5¼–6 mm.

*Hab.* Southern Rhodesia (Sebakwe).

with the margin distinctly reflexed all round; head and clypeus conspicuously granulose; prothorax very closely punctured, clothed with long, appressed greyish hairs and having a plain longitudinal impressed line in the centre; elytra sub-costulate, intervals filled with cicatricose punctures, giving them a very coriaceous appearance, and clothed like the scutellum with long, decumbent greyish hairs. In general appearance this species is closely related to *A. picticollis*, but the appressed hairs forming the vestiture are longer; the shape of the genital armature is also somewhat similar, but the upper edge of the valves is more apart, parallel for a short distance only and thence more open and more sinuate.

Length 12 mm.; width 7 mm.

*Hab.* Cape Colony (Seymour), Natal (Durban).

One of my male examples has the anterior part of the clypeus non-emarginate.

ADORETUS PICINUS, Fähr.,
Insect. Caffr., ii., p. 73 ♂.

*A. nasutus*, Fähr., loc. cit., p. 72 ♀.

Dark chestnut-brown, with a very distinct metallic sheen on the upper side; sides of prothorax, pectus, and legs testaceous; head and prothorax very closely granulose; prothorax and elytra of the normal shape, the former is somewhat closely punctured, the latter only slightly costulate with the intervals cicatricose, and the whole surface is clothed with somewhat long, appressed hairs; the clypeus is straight laterally at the base, thence obliquely rounded, broadly emarginate in front in the male, only slightly in the female, and with the margin conspicuously raised; the shape of the genital armature is not unlike that of *A. testaceus*, but it is a little narrower, more parallel, and not slightly inflated laterally towards the apex.

The co-type of *A. picinus*, Fähr., is undoubtedly the male of *A. nasutus*, and the only example of this sex which I have seen. Fährœus states, however, in his description of *A. picinus*, that the apical margin of the clypeus is rounded.

Length 11½–12½ mm.; width 5½–6 mm.

*Hab.* Cape Colony (Prieska, Kakamas).

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ADORETUS CURTULUS, n. spec., pl. xli., fig. 25.

Æneous, clothed with appressed, dense, greyish-white squamose hairs; antennæ testaceous, club of ♂ very long; clypeus straight laterally, arcuate in front, head normally scabrose; prothorax deeply and somewhat closely punctured, especially laterally; elytra covered with similar punctures somewhat regularly seriate, and having on each side three distant costæ; under side and legs moderately pubescent. This species is very short, and comparatively very broad, and is thus easily recognised by its facies. In the shape of the genital armature it approaches *A. capicola.*

(*Species which I have not been able to identify.*)

ADORETUS ATRICAPILLUS, Klug,

Monatsb. Berl. Acad., 1855, p. 659 ; Peter's Reis., p. 261.

"Elongate, pale testaceous, head black, clypeus short, ferruginous. Length 4 lin.

One example from Sena. Similar to *A. nigrifrons*, but relatively somewhat narrower, more strongly punctate and almost glabrous. The clypeus, instead of being rounded and produced, is short and truncate, with the margin only a little reflexed. The line which divides the clypeus from the head is also more prominent, but not straight, being arched inwards. The head only is dark brown, almost black, the clypeus ferruginous, and the rest of the body and the legs pale-yellowish. The apices of the femora, tibiæ and tarsal joints are brown."

ADORETUS CUPREUS, Arrow,

Annals and Magaz. Natur. Hist., 1899, vol. iv., p. 121.

"Elongato-ovate, broad, chestnut-brown with a coppery sheen sparsely clothed with greyish hairs or scales on the upper side, and more densely so on the under side ; head moderately large, rugose, clypeus arcuate, wrinkled and ustulate ; prothorax three times broader than long, very closely punctate, sparsely setulose ; scutellum rugose ; elytra finely rugoso-punctate, obsoletely costate, sparingly setulose, but with larger white scales scattered towards the costules, sides wholly arcuate.

Length 10½–12 mm. Female.

This species has apparently some affinity with *A. picinus*, Bohem., which, however, has the prothorax coarsely punctured and the sides of the elytra straight as far as the middle. In *A. cupreus* the width of the elytra is greatest at the middle, and the entire sculpture is very fine and close.

*Hab.* Barberton, and in Natal."

Mr. Arrow is mistaken in saying that in *A. picinus*, Bohem., the sides of the prothorax are straight as far as the middle.

ADORETUS MURINUS, Burm.,

Handb. d. Entomol., iv., 1, p. 468.

"Fuscous, clothed with a greyish pubescence ; outer margin of the prothorax, costæ of elytra and legs paler than the background.

Length 5 lin.

*Hab.* South Africa ; received from Drège.

Tolerably vivid brown, shiny on account of the sparseness of the hairy coating and punctures. Antennæ, palpi, sides of pronotum and legs yellowish brown; the scutellum and also the four small costæ of the elytra and even sometimes the abdomen and sternum of the same colour, hind angles of pronotum rounded; the hairs of the male are shorter and whitish, those of the female are longer, grey with a tinge of yellow; tarsi darker brown than the rest of the leg. The small head distinguishes this species at once from all the others."

Burmeister assigns also to this species delicately formed mouth parts, a scarcely crenular labrum, fine and pointed maxillary teeth, tarsi long and thin, and hind coxæ with a narrow but long truncate process.

ADORETUS SUBCOSTATUS, Klug,

Monatsb. Berl. Acad., 1855, p. 659; Peter's Reis., p. 261.

"Elongate, pale testaceous, head brown, elytra rugoso-punctate, sub-costate.

Length 4½ lin.

One example from Tette. In regard to shape and colouration what has been said of *A. atricapillus* holds good for this species also, excepting that the head is simply brown. With regard to the sculpturing, the punctures on the prothorax and elytra are particularly deeper, those on the latter being connected by transverse wrinkles. Besides there are three only slightly raised lines (of which traces occur in *A. nigrifons*) extending along the whole length of the elytra. The tarsi are brown. One example from Tette (Mozambique)."

ADORETUS TARSATUS, Klug,

Monatsb. Berl. Acad., 1855, p. 659; Peter's Reis., p. 260.

"Elongate, fuscous, clothed with a whitish pubescence, sides of prothorax, pectus, abdomen, and legs pallid, tarsi ferruginous.

Length 4 lin.

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ADORETUS KAHLEI, Nonfr., Entom. Nachr., 1892, p. 110.

"Oblong, convex; purple, persicino-setose, under side shining, suffused with purple, densely squamose. Head sub-rotund, deeply punctate, shining, briefly setose, clypeus rounded, distinctly marginate; antennæ red; thorax plane, deeply and closely punctate, shining, purple, densely setose; scutellum cordate, vaguely punctate. Elytra convex, elongate, parallel, granulated, briefly but densely setose, shining. Pygidium aciculate, opaque. Legs and tarsi setose, with the setæ somewhat fulvous, shining; anterior tibiæ sharply tridentate. Length 14 mm. Zambesi River.

Elongato-ovate, the head of medium size, densely punctate everywhere on the upper side, rugoso-punctate in parts with raised longitudinal stripes on the elytra. Colour pale yellowish brown; clypeus, palpi, antennæ, and sides of the prothorax paler yellow; under side as well as the legs pale yellow, the only brownish part being a mark on each side of the sternum in front of the attachment of the hind femora, and also on the tarsi of all the legs. Several examples from Tette (Mozambique)."

Through the courtesy of Herr Kolbe, of the Berlin Museum, I have been able to examine one of the co-types. The shape, sculpture, and vestiture of this species are the same as in *A. picinus*, Fähr., but the clypeus is not quite so deeply emarginate in the centre as in that species; the emargination is more like that of *A. tessullatus*, Burm., = *A. maculatus*, Fähr.

## Tribe ANOMALINI.

### *Key to the Genera.*

A². Elytra straight at the base between the scutellum and the humeral angle; elytra sub-cylindrical.

Maxillæ with hooked teeth; hind tibiæ a little narrower at the apex than in the median part .. .. .. .. .. .. .. .. *Anomala.*

Maxillæ without hooked teeth, hind tibiæ broadly dilated at the apex .. .. .. .. .. .. .. .. .. .. .. .. .. .. *Nongoma.*

A¹. Elytra very slanting at the base from the humeral angle to the scutellum; elytra plane or very little convex.

B². Anterior tibiæ bi-dentate, basal tooth very small or nearly obliterated, apical one somewhat straight.

Pygidium not hairy: mesosternum simple; median part of the base of prothorax not emarginate .. .. .. .. .. *Peripopillia.*

Pygidium with two patches of whitish hairs, mesosternum produced into a conspicuous process; median part of the base of the prothorax emarginate .. .. .. .. .. .. *Popillia.*

B¹. Anterior tibiæ bi-dentate, basal tooth very sharp, apical one curved.

*a*². Maxillæ sharply toothed.

Clypeus rounded laterally, margins much reflexed; club of antennæ very large in the male, prothorax not marginate in the median part of the base .. .. .. .. *Pharaonus.*

Clypeus as long as broad, sub-parallel, truncate and reflexed at the tip; prothorax longer than broad, sinuate laterally, marginate all round .. .. .. .. *Tabora.*

$a^1$. Maxillæ not sharply toothed.

Upper lobe of maxillæ produced into a laminate process rounded at the tip and hollowed inwardly; clypeus not reflexed at the tip; prothorax marginate all round .. *Gnatholabis.*

## GEN. ANOMALA, Samouelle,

Ent. Usef. Compend., i., 1819, p. 191.

*Heteroplia*, Burm.; *Hoplopus*, Cast.; *Rhinoplia*, Burm.

Mentum more or less ovate laterally from the base to the point of insertion of the palpi, parallel thence with the outer angles slightly rounded, and the apical part broadly emarginate in the centre, it has on the outer face a deep cordiform impression reaching from the apex to somewhat past the median part, and the non-impressed part is covered with dense and very long fulvous setæ, the apical margin has a few short setæ, the apical joint of the labial palpi is as long as the two preceding, slightly curved, truncate at apex and occasionally impressed longitudinally in the outer face; maxillæ armed at the tip with three powerful hooked teeth, the two lower ones of which are bifid or geminate, but connate; the basal one is sometimes distinctly trifid (*A. ustulata*); but in *A. nigrovestita* the upper teeth are reduced to a round lobe followed by three teeth disposed transversely; maxillary palpi moderately long, apical joint as long as the two preceding taken together, sub-fusiform, obtuse at the tip, and slightly impressed laterally; antennæ nine-jointed, basal joint slender for half the length, clubbed thence, and as long as all the three joints following; the sixth joint is narrow, transverse, the club is tri-jointed, the joints somewhat hairy outwardly, moderately long, sometimes of the same length in both sexes, sometimes longer in the male than in the female (*A. zambesicola*); head moderately large and having very large eyes divided for about one-third of their length by the canthus of the genæ; the clypeus is usually shorter than the head, sometimes parallel laterally, and sub-truncate or arcuate at apex, but always with the outer angles more or less rounded, it is separated from the head by a transverse impressed line reaching from eye to eye, and is always more densely or more rugosely punctured than the head; prothorax marginate all round, obliquely attenuate laterally from about the median part to the apex, sub-parallel from the median to the basal part, where it is, however, always slightly broader than across the median, the basal angles without being sharp are well-defined, the surface is somewhat convex but very sloping in front, the base is bi-sinuate, and along the

outer margin is a series of setigerous punctures often asymmetrical and varying from 7 to 8; scutellum ogival, slightly transversely impressed at the base and a little broader than long; elytra very little wider at the base than the basal part of the prothorax, slightly bi-sinuate below the humeral angle, and gradually ampliated laterally from one-third to about three-fourths of the length, and not much attenuate thence towards the rounded posterior part, the outer and posterior margins are sharp, they are moderately convex, but more so in the posterior part where there is a median supra-apical callus, near the humeral angle there is also a conspicuous one which is sometimes prolonged for one-sixth of the length as an elongate raised surface, they have more or less deeply punctured striæ, geminate in the dorsal part and separated by smooth or punctured, round or sharp costæ, the striæ of the median dorsal part do not reach quite the apex, and the supra-lateral ones are interrupted on the humeral callus, between the second and third dorsal costæ the space is somewhat broadening near the base and filled with numerous punctures resolving themselves into one or two regular series at some distance from the base; the propygidium is partly covered by the elytra, the latter is declivous or abruptly sloping and more or less convex, and has a fringe of hairs along the inferior margin; the segment of the abdomen, except the sixth and seventh in the male and the sixth in the female, has a transverse series of deep setigerous punctures; metasternum somewhat broad, usually with a shallow median impressed line or depression; mesosternum not acuminate between the intermediate coxæ the anterior edges of which as well as of the posterior ones are sharply carinate; hind trochanters with a lobate process; anterior tibiæ bi- or tri-dentate and having a very distinct inner spur situated at some distance from the point of insertion of the tarsi the joints of which are robust, sub-triangular, spinose beneath and provided with two hinged parallel claws the outer of which is a little shorter than the inner; this latter is either simple in the anterior and intermediate tarsi, simple in the anterior only, or cleft transversely in the male, but in all the South African species known to me, except one (*A. nigrovestita*), the female has the claw of both the anterior and intermediate tarsi cleft; the intermediate and hind tibiæ are compressed inwardly, slightly attenuate at apex and have two slight, transverse bristly ridges on the outer part. The livery of the South African species is of two sorts. They are either completely more or less pale testaceous: the elytra are either entirely or partly black and shiny, but without a metallic sheen: or the upper side, and sometimes the whole body, is metallic and either variegated with bronze-red, brown or black, or also

wholly testaceous. They are crepuscular or nocturnal insects, and can be captured by beating the trees.

The specific study of the 28 South African species known to me is extremely difficult. An examination of the genital armature of the males, as figured in plate xli. will, however, easily lead to their identification, but all the females are extremely alike. I have had no difficulty, however, in identifying both sexes by means of the locality, for a glance at the habitat of the species shows how restricted is their area of distribution in South Africa, and so far as I know *A. fuscipes* is the only one having a somewhat wide range, for it occurs in the Orange River Colony, in Buluwayo, and Mazoe in Southern Rhodesia, and also in Northern Damaraland.

### *Key to the Species.*

A². Inner claw of the anterior tarsi somewhat slender in both sexes.

B⁴. Inner claw of the anterior tarsi only cleft in the male and in the female.

Ferruginous red, elytra piceous and with a narrow reddish margin; prothorax closely aciculate; clypeus very narrow, broadly reflexed; intervals of elytra conspicuously coriaceous (pl. li., fig. 26) .. .. .. .. .. .. .. *nigrovestita.*

B³. Inner claw of the anterior and intermediate tarsi simple in the male, cleft in the female.

*a*². Elytra piceous.

Piceous with the frontal part of the head and the anterior legs reddish; prothorax indistinctly aciculate; clypeus narrow, hollow, and broadly reflexed; intervals of elytra smooth (pl. li., fig. 27).. .. .. *vetula.*

*a*¹. Whole body testaceous.

*b*². Anterior tibiæ tri-dentate.

Head and clypeus somewhat roughly punctured; prothorax almost impunctate, and without any median impression (pl. li., fig. 29) .. .. .. .. *damara.*

*b*¹. Anterior tibiæ bi-dentate.

Head and clypeus with round punctures, not shagreened; clypeus quadrate; head and prothorax each with two fuscous patches; elytra with a broad sutural black band (pl. li., fig. 28) .. .. .. .. *bohemani.*

Head and clypeus shagreened; prothorax impunctate, very vaguely aciculate, and having a short basal longitudinal impressed line (pl. li., fig. 30) .. .. *exoleta.*

Head and clypeus shagreened; prothorax distinctly aciculate, and having a very faint median longitudinal impressed line (pl. li., fig. 31) .. .. .. .. .. *exitialis.*

B². Inner claw of the anterior tarsi cleft, and that of the intermediate simple in the male.

*a*². Clypeus parallel.
*b*². Colour testaceous or testaceous red.
*c*². Anterior tibiæ bi-dentate.

Clypeus a little elongate and slightly arcuate in front; prothorax indistinctly aciculate laterally (pl. li., fig. 32) .. .. .. .. .. .. .. .. .. .. .. .. *immatura.*

Clypeus not very elongate and sub-truncate in front; prothorax punctulate laterally (pl. li., fig. 33) .. .. *zambesicola.*

Clypeus very short and sub-truncate in front; prothorax hardly punctulate laterally (pl. li., fig. 34) .. *repensa.*

Clypeus sub-truncate in front, but with the outer angles somewhat rounded; prothorax distinctly aciculate (pl. li., fig. 35) .. .. .. .. .. .. .. .. *transvaalensis.*

Clypeus sub-truncate in front, but wider at its extremity than at the base .. .. .. .. .. .. *clypeata.*

*c*¹. Anterior tibiæ tri-dentate.

Clypeus truncate in front; prothorax distinctly aciculate all over .. .. .. .. .. .. .. .. .. *colluta.*

*b*¹. Elytra wholly or partly piceous.

Testaceous red with two black patches on the prothorax, and the elytra wholly or partially piceous; prothorax finely punctulate (pl. li., fig. 36) .. .. *pinguis.*

*a*¹. Clypeus broadly rounded laterally.

Prothorax finely punctulate, with a median fuscous longitudinal band, and a transverse patch on each side of it; elytra with a very narrow sutural infuscate band (pl. li., fig. 37) .. .. .. .. .. *ustulata.*

B¹. Inner claw of anterior and intermediate tarsi cleft in the male.

*a*². Anterior tibiæ tri-dentate outwardly.

Testaceous, clypeus very little rounded laterally; prothorax aciculate (pl. li., fig. 39) .. .. .. .. .. *tolerata.*

*a*¹. Anterior tibiæ bi-dentate outwardly.
*b*². Body testaceous or brick-red.

Body elongate, somewhat narrow, brick-red with the tibiæ black; clypeus plainly rounded laterally, not aciculate in the discoidal part (pl. li., fig. 38) .. .. *intrusa.*

*b*¹. Elytra with a distinct infuscate sutural band.

Testaceous, head infuscate; prothorax plainly punctulate, outer and basal margins of the elytra and suture narrowly infuscate (pl. li., fig. 37) .. .. *probativa.*

Testaceous, head infuscate; prothorax aciculate, elytra with a triangular fuscous basal band continued along the suture (pl. li., fig. 40) .. .. .. .. .. *phthysica.*

A¹. Inner claw of the anterior tarsi broad or very broad in the male.

B². Prothorax and elytra metallic, more or less deeply fuscous or chestnut-brown.

Head finely rugose; prothorax very deeply and closely punctured; the three first costæ on each elytron subtectiform and smooth (pl. li., fig. 41) .. .. .. .. *dita.*

Head finely rugose; prothorax with closely set but not deep punctures; the three first costæ on each elytron transversely plicate .. .. .. .. .. .. .. .. *ovampoa.*

Head closely rugulose; prothorax with very faint, round, small punctures more distinct on the sides, first and second intervals of each elytron sub-tectiform, impunctate, punctures on the striæ very deep; second interval pluri-punctate for about a quarter of the length (pl. li., fig. 44) *castanea.*

Head closely rugulose; prothorax with distinct but shallow punctures; punctures on the striæ round and moderately deep, second interval pluri-punctate for half the length.

Inner claw of the male moderately broad; under side testaceous (pl. li., fig. 42) .. .. .. .. .. .. *caffra.*

Inner claw of the male very broad; under side the colour of the elytra (pl. li., fig. 43) .. .. .. *resplendens.*

B¹. Prothorax and elytra partly or completely testaceous.

Head slightly infuscate; prothorax with a very broad fuscous patch; elytra sharply costate and with the striæ very deeply punctured, nearly totally piceous with a broad supra-marginal testaceous band, or piceous with a broad triangular infuscate sutural band (pl. li., fig. 46) .. .. *dorsata.*

Head infuscate; prothorax with a very broad discoidal fuscous patch; elytra costate on the dorsal part the striæ of which are fuscous and the costæ testaceous; second interval irregularly punctured for four-fifths of the length *parca.*

Head slightly infuscate, the rest of the body testaceous; elytra costate, second interval irregularly punctured for a short distance only (pl. li., fig. 45) .. .. .. .. .. *fusciceps.*

Head and median part of the prothorax reddish brown, metallic; elytra somewhat short, costulate, flavescent, and with the second interval irregularly punctured for a quarter of the length (pl. li., fig. 47) .. .. .. .. .. .. .. *delagoa.*

ANOMALA NIGROVESTITA, Arr.,

Plate XLI., fig. 26.

Trans. Entomol. Soc. Lond., 1899, p. 119.

Ferruginous red, moderately shining, elytra piceous, with a basal humeral reddish patch and a narrow sutural band of the same colour;

head very small, deeply and roughly punctured like the clypeus which is somewhat depressed with the margins much reflexed, broadly rounded laterally and somewhat arcuate in front; prothorax somewhat sinuate laterally between the median part and the basal angle, deeply and moderately closely punctured and having in the centre from the median part to the base a narrow, elongate, impunctate space, along the outer margin there is a series of not closely set, reddish bristles; scutellum with a median impression, deeply punctured; elytra nearly parallel in the male, slightly ampliate at about one-third of the length in the female, punctato-striate, the punctures seriate but somewhat transverse, shallow, very irregular, and giving to the elytra a very coriaceous appearance, they are not obliterated on the apical callus which is not very conspicuous, and the intervals are costulate, the outer margin has a fringe of reddish, bristle-like hairs; pygidium deeply and coarsely punctured and fringed at the apex with long, reddish-brown hairs; pectus and legs villose, the former very densely; the hind tibiæ are darker than the others, the inner claw of the anterior tarsi only is cleft, in both sexes.

Length 13–15 mm.; width 7–7¼ mm.

*Hab.* Transvaal (Johannesburg).

ANOMALA VETULA, Wiedem.,
Plate XLI., fig. 27.
Germ. Mag. Entom., iv., p. 133.

*A. nitens*, Burm., Handb. d. Entom., iv., 1., p. 238.

*A. ærea*, Blanch., Catal. Coll. Entom., p. 186.

Piceous black, very shining and with a faint metallic tinge, head and anterior legs reddish, palpi and antennæ rufescent; prothorax with a very narrow rufescent margin, but occasionally reddish brown with two black patches on the prothorax; head somewhat narrow with the clypeus distinctly hollowed and the margins strongly reflexed, is broadly rounded laterally, but nearly straight in front and roughly punctured, the head is also roughly punctured in the anterior part and more regularly and somewhat closely in the posterior; prothorax plainly attenuate diagonally laterally from the median to the anterior part, very slightly ampliate in the middle, nearly straight thence to the basal angle, bi-sinuate along the base and having a narrow marginal fold, moderately convex, faintly aciculate in the discoidal part and a little more distinctly so on the sides; scutellum impressed at the apex, plainly punctate and having also a faint trace of a longitudinal impressed median line; elytra not broader than the prothorax at the base but slightly ampliated from

the shoulder to a third of the length and much more strongly there, convex, very deeply punctato-striate with the intervals between each duplicate series of punctures costulate, and more distinctly so in the male than in the female, but the interval between the juxta-sutural costa and the second is filled in the anterior part with irregular non-seriate rough punctures, these rows of punctures are obliterated near the humeral and the apical callus which are very distinct; pygidium covered with round, equi-distant punctures moderately closely set and fringed at apex with long fulvous hairs, the pectus is clothed with similar villose hairs and each abdominal segment has a transverse median row of similar but shorter ones in the female; legs somewhat villose; anterior tibiæ bi-dentate outwardly in both sexes, inner claw of the anterior and intermediate tarsi simple in the male, cleft in the female.

Length 13–16½ mm.; width 7–9 mm.

*Hab.* Cape Colony (Mossel Bay, Port Elizabeth, Graham's Town).

ANOMALA BOHEMANI, Fähr., n. spec.,
Plate LXI., fig. 28.
Insect. Caffrar., ii., p. 65.

Testaceous, without any metallic sheen, head with the sides diagonally fuscous, prothorax with two sub-longitudinal fuscous patches occasionally obliterated; elytra with a broad sutural black band extending as far as the second or even the third stria, but confined in the extreme posterior part to the suture only, the outer margin has also a black line except near the humeral part; clypeus parallel laterally, truncate in front with the outer angles somewhat rounded and with the anterior margin very reflexed and covered, like the head, with moderately closely set round punctures; prothorax a little longer in proportion to the size than in the other South African species, being in length half that of the elytra, faintly aciculate in the centre and more distinctly on the sides; elytra of the normal shape, plainly regularly punctato-striate, with the punctures round and somewhat deep, second interval numerously and irregularly punctured from the base to four-fifths of the length in both sexes; propygidium and pygidium somewhat finely punctate; pectus densely pubescent; anterior tibiæ bi-dentate outwardly; in the male the club of the antennæ is as long as all the other joints taken together, and the inner claw of the anterior and intermediate tarsi is simple, and cleft in the female.

Length 10½–11½ mm.; width 6 mm.

*Hab.* Natal (Durban), Orange River (teste Boheman).

ANOMALA DAMARA, n. spec.,

Plate XLI., fig. 29.

Pale brick-red, shining, palpi and antennæ testaceous, tarsi darker, head very slightly infuscate in the frontal part, deeply and very closely punctured, the clypeus is rounded laterally, slightly arcuate in front in the male and sub-truncate in the female, the margins are reflexed and the punctuation is more rugose than on the head; prothorax nearly sub-parallel from the median very slightly ampliate part to the basal angle, but slightly sinuate, little convex and impunctate; scutellum impressed longitudinally in the middle and very slightly punctate; elytra sinuate laterally at a short distance from the shoulder and ampliate from about the median part, somewhat deeply punctato-striate with some of the intervals faintly costulate and the broad interval between the first and the second stria filled with irregular shallow punctures giving it a coriaceous appearance, the punctures are nearly obliterated on the humeral callus but not on the apical; pygidium with shallow, not closely set, small punctures and having no fringe of hairs; pectus clothed with flavous hairs, legs slightly hairy inwardly; anterior tibiæ bi-dentate outwardly, inner claw of anterior and intermediate tarsi simple in the male, cleft in the female.

Length 13½–15 mm.; width 8 mm.

*Hab.* Damaraland (Otjimbingwe).

ANOMALA EXOLETA, n. spec.,

Plate XLI., fig. 30.

Pale testaceous, shining, hind tibiæ and tarsi darker; head finely yet deeply and closely punctured especially in the anterior part, clypeus sub-truncate in front but broadly rounded laterally, the margin is reflexed and the punctuation is similar to that of the anterior part of the head; prothorax slightly sinuate laterally between the median part which is not ampliate and the basal angle where it is slightly broader than across the median part, very finely aciculate, but the aciculation is hardly distinct in the centre of the disk where there is a faint impressed median line obliterated occasionally; scutellum with a few small lateral and basal punctures; elytra regularly punctato-striate, the punctures are moderately deep and the four raised intervals distinct, the punctures are obliterated near the humeral and apical callus, and those between the first and second punctate striæ are shallow but not very rugose; the shape is similar to that of the two preceding species; pygidium very closely

punctured, not fringed with hairs; pectus, abdomen, and legs as in *A. damara;* anterior tibiæ bi-dentate outwardly, inner claw of anterior and intermediate tarsi simple in the male, cleft in the female.

Length 15–18½ mm.; width 8–9½ mm.

*Hab.* Orange River Colony (Bothaville), Mozambique (Lourenço-Marquez).

ANOMALA EXITIALIS, n. spec.,

Plate XLI., fig. 31.

Very closely allied to *A. exoleta;* the colour, shape, and sculpture are similar, but the size is somewhat larger; the difference is in the shape of the clypeus, which is more parallel laterally, the outer angles are not quite so broadly rounded, and the anterior part is almost truncate; the head and clypeus are a little more roughly punctured, the aciculation of the prothorax is more distinct, and the anterior tibiæ have either a third basal not very pronounced outer tooth or a distinct sinuation; the shape of the genital armature of the male differs much from that of any other South African species; the inner claw of the anterior and intermediate tarsi is simple in the male, cleft in the female.

Length 17–18 mm.; width 9–9½ mm.

*Hab.* Southern Rhodesia (Salisbury, Middle Limpopo), Mozambique (Lourenço-Marquez).

ANOMALA IMMATURA, Bohem.,

Plate XLI., fig. 32.

Öfvers. Vet. Ak. Förh., 1860, p. 16.

*A. solida,** Arrow, Trans. Entom. Soc., 1899, p. 257.

This species closely resembles *A. exoleta* and *A. exitialis*, but it is not quite so pale testaceous, the clypeus is longer, quite parallel laterally, while the anterior part is very slightly arcuate with the outer angles only moderately rounded, and the anterior margin is conspicuously reflexed; the punctures on the elytra are rounder and less rugose, and the intervals are very little raised; the inner claw of the anterior tarsi is slightly cleft in the male, but in the female that of the anterior and of the intermediate ones are deeply incised. The shape of the genital armature of the male is

* In Boheman's type the fore tibiæ are tri-dentate but the basal tooth is very small, whereas they are bi-dentate in *A. solida* (*mutata*), Arrow, but there is no doubt that the two species are one owing to the similarity of the genital armature.

very different from that of the three allied species mentioned before.

Length 15–17 mm.; width 7½–9½ mm.

*Hab.* Cape Colony (Griqualand West), Transvaal (Potchefstroom).

### Anomala zambesicola, n. spec.,

Plate XLI., fig. 33.

Light brick-red with the clypeus a little darker than the rest of the body. This species resembles *A. immatura*, but it is a little wider in proportion to its length, the club of the antennæ of the male is a little longer, and is equal in length to all the other joints put together; the head and clypeus are a little more roughly punctured; the latter is not quite so long, and is sub-truncate in the anterior part; the punctures on the prothorax are more distinct, and there is in the median part of the disk a short, impressed longitudinal line; the scutellum is a little shorter; the elytra in the male have several irregular rows of punctures on the first and second intervals, but they are normally geminate and regular in the female; the pygidium is moderately closely punctured in the median part, scrobiculate laterally, and is not fringed with hairs, but the pectus is densely clothed with light fulvous ones; anterior tibiæ bi-dentate outwardly; inner claw of the anterior tarsi of the male slightly cleft, in the female the inner claw of both the anterior and intermediate tarsi are somewhat deeply cleft.

Length 13½–15 mm.; width 7½–9 mm.

*Hab.* Southern Rhodesia (Salisbury, Mazoë, Enkeldoorn), Ovampoland (Okovango River).

### Anomala repensa, n. spec.,

Plate XLI., fig. 34.

This species is so closely allied to *A. zambesicola* that it is difficult at first sight to distinguish it, except by comparing the genital armatures, but the clypeus is slightly shorter and more broadly rounded laterally, although equally truncate in front, and the anterior margin is more vertically reflexed; the aciculation on the prothorax of the male is very slight, but in the female it is the denser and much more distinct; the intervals between the punctate striæ on the elytra are much less numerously punctate, and the valves of the genital armature are more elongate, more sharply acuminate at the tip, where they diverge much more, and have on

each side a much longer and also much deeper impression; in the male the inner claw of the anterior and intermediate tarsi is very slightly cleft, but deeply so in the female, and the colour is a little paler in both sexes than in *A. zambesicola*, but that of the head, tarsi, and hind tibiæ is the same.

Length 16–16½ mm.; width 9 mm.

*Hab.* Transvaal (Pretoria, Johannesburg).

ANOMALA CLYPEATA, Arr.,
Trans. Entom. Soc. Lond., 1899, p. 257.

"Very closely allied to *A. solida*,* Arr., but a little longer; testaceous, clypeus sub-truncate and widest towards the anterior margin, lateral margin of the prothorax sub-angulate in the median part; pygidium roughly punctate.

Length 17–19 mm.

Male: Claws of the anterior tarsi not evenly cleft, basal outer teeth of the anterior tibiæ long and curved, tarsi long and robust.

Female: Claws of the anterior and intermediate tarsi evenly cleft, basal outer teeth of the anterior tibiæ long and straight, tarsi shorter and more slender than in the male.

*Hab.* Cape Colony (Adelaide).

This is closely allied to *A. solida*, but is distinguished by the shape of the clypeus, which is widest at its extremity."

ANOMALA PINGUIS, Péring.,
Plate XLI., fig. 36.
Trans. Entomol. Soc., 1896, p. 161.

Testaceous red, with two broad longitudinal black patches on the prothorax; elytra piceous, with a very small basal testaceous red patch, which, however, in some examples is developed into a broad and long lateral band, hind and intermediate tibiæ and all the tarsi piceous; clypeus slightly fuscous, closely and roughly punctured, sub-truncate in front, well rounded laterally, and with the anterior margin much reflexed, especially in the male, anterior part of the head deeply and closely punctate; prothorax slightly wider in the ampliate median part than at the base, finely and closely punctulate, and having a fine median line faintly impressed; scutellum more distinctly punctulate in the female than in the male; elytra deeply and irregularly punctato-striate with the raised intervals plainly

* *A. immaculata*, Boh.

costate in both sexes, but the punctures are deeper and more irregular in the male; pygidium very closely punctured; pectus not densely hairy; anterior tibiæ bi-dentate in both sexes; inner claw of the anterior tarsi only cleft in the male, deeply cleft in both the anterior and intermediate ones in the female.

Length 15–18 mm.; width 8–10 mm.

*Hab.* Southern Rhodesia (Salisbury).

### Anomala colluta, n. spec.

Testaceous, shining, with the clypeus, the hind tibiæ, and the tarsi piceous red. This species, of which the male is not known to me, is distinguished from the other testaceous species by the more massive body; the anterior tibiæ are plainly tri-dentate, as in *A. damara;* the clypeus is quite parallel laterally, as in *A. immatura*, but sub-truncate in front, and the head and clypeus are a little more rugose than in these two species; the prothorax is plainly punctulate and has a median longitudinal impressed line on the disk; the scutellum is faintly aciculate, and the punctate striæ on the elytra are normal; the pygidium is deeply and irregularly punctured and scrobiculate laterally, and the pectus is densely villose; the inner claw of the anterior and intermediate tarsi are deeply and broadly cleft.

Length 18 mm.; width 11½ mm.

*Hab.* Mozambique (Lourenço-Marquez).

### Anomala transvaalensis, Arr.,

Plate XLI., fig. 35.

Trans. Entom. Soc. Lond., 1899, p. 258.

*A. pallida*, Fähr. (nec Fabric., Insect. Caffr., ii., p. 60.)

Testaceous, shining, legs reddish, hind tibiæ piceous red; it has the general appearance of *A. immatura*, although smaller, but the shape of the clypeus is similar to that of *A. zambesicola*, and the punctuation is nearly the same on the head and prothorax, but the scutellum is more closely punctured, and the series of punctures on the elytra are much more regular and geminate, except in the first interval; the pygidium is somewhat closely and deeply punctured and scrobiculate laterally; the inner claw of the anterior tarsi of the male is somewhat deeply cleft. The female is unknown to me.

Length 13½–14½ mm.; width 7–8 mm.

*Hab.* Transvaal (Pretoria), British Bechuanaland (Kanye), Cape Colony (Griqualand West).

ANOMALA USTULATA, Arrow,
Plate XLI., fig. 37.
Annals Magaz. Nat. Hist., 1899, iv., p. 118.

Pale testaceous, with the whole head fuscous brown, and having on the prothorax a median longitudinal narrow black patch and a transverse one of equal length on each side of it, tarsi reddish brown; clypeus and anterior part of the head scrobiculate, basal part of the latter deeply and somewhat closely punctate; club of the antennæ not longer than the four preceding joints taken together in the male; prothorax short, twice as broad as long, and having along the outer margin a row of distant bristles; scutellum very closely and somewhat deeply punctured along the base and on the sides, and impressed longitudinally at the apex; elytra pale testaceous but having a narrow infuscate line alongside the scutellum, the suture, and the outer margin, there is no raised interval, the striæ are regularly punctured, and the punctures round and moderately deep; the pygidium is finely coriaceous, and the pectus is moderately densely hairy; the anterior tibiæ are bi-dentate outwardly, and the inner claw of the anterior and intermediate tarsi is strongly cleft in both sexes. The genital armature of the male is exactly similar to that of *A. probativa.* The female has sometimes the whole of the discoidal part of the prothorax suffused with fuscous brown.

Length 16 mm.; width 8 mm.

*Hab.* Mozambique (Lourenço-Marquez), Transvaal (Pretoria), Damaraland.

ANOMALA INTRUSA, n. spec.,
Plate XLI., fig. 38.

Red, moderately shining, with the tibiæ and the tarsi black; in the male, however, only the outer part of the anterior tibiæ is black; clypeus truncate in front, with the outer angles broadly rounded and the anterior margin moderately reflexed, it is very roughly punctate, like the anterior part of the head, and the eyes are very large in the male; prothorax of normal shape, faintly aciculate laterally and having in the female a short, median impressed line which in the male is only faintly indicated; scutellum with a few scattered punctures; elytra conspicuously sub-parallel in the male, normally ampliated laterally from a third of the length in the

female, very deeply punctato-striate and plainly costate in both sexes, but with the punctures more irregular in the discoidal part in the male; pygidium somewhat closely punctured in the middle and sub-scrobiculate laterally; pectus moderately hairy; anterior tibiæ bi-dentate outwardly; inner claw of anterior and intermediate tarsi cleft in both the sexes. In this species the three teeth of the maxillæ are not bifid, and the shape of the genital armature does not at all resemble that of the other South African species.

Length 14–15 mm.; width $6\frac{1}{2}$–$7\frac{1}{2}$ mm.

I have seen three males of this species, easily recognisable by their elongate, sub-parallel shape; in one of them the claws are partly broken; in the second the inner claw of the intermediate tarsi is distinctly although not deeply cleft, but in the third example this claw is simple.

*Hab.* Southern Rhodesia (Salisbury).

### Anomala tolerata, n. spec.,

Plate XLI., fig. 39.

Pale testaceous, with the clypeus mostly always slightly infuscate, hind tibiæ piceous, head very roughly and closely punctured, clypeus sub-truncate at apex and moderately broadly rounded laterally, anterior margin reflexed and moderately highly raised; prothorax nearly straight laterally from the median part to the basal angle, and moderately closely aciculate all over; scutellum with scattered punctures; elytra of the normal shape, deeply punctured and costulate in both sexes; pygidium deeply and not very closely punctured laterally, and less closely in the centre; pectus villose; anterior tibiæ tri-dentate in the male, bi-dentate in the female; inner claw of anterior and intermediate tarsi cleft in both sexes.

Length $12\frac{1}{2}$–$13\frac{1}{2}$ mm.; width 6–$6\frac{1}{2}$ mm.

*Hab.* Southern Rhodesia (Salisbury, Enkeldoorn).

### Anomala probativa, n. spec.,

Plate XLI., fig. 37.

Pale testaceous, with a narrow border on the elytra along the base and the scutellum, and a slightly broader one along the suture; the head is also more or less deeply fuscous, and in many examples the humeral callus and the striæ are more or less deeply infuscate; clypeus broadly rounded laterally, sub-truncate in front in the male, arcuate in the female, and with the anterior margin moderately highly reflexed, it is very closely shagreened, the head is equally

shagreened, but more regularly punctate in the posterior part; prothorax of the normal shape, and having a fringe of long, not closely set hairs, it is covered with very closely set round punctures, and has on the disk a very short, median impressed longitudinal line which is often obliterated in the male; scutellum with moderately closely set punctures, and having in the female a distinct longitudinal impressed line; elytra deeply punctato-striate in both sexes, and with the intervals plainly costate, the punctures on the first one are very coarse and closely set; the pygidium is very closely aciculate and is plainly fringed with somewhat long hairs all round, including the basal part in the female, but the basal fringe is very short and not dense in the male; anterior tibiæ bi-dentate outwardly, inner claw of the anterior and intermediate tarsi cleft; pectus densely hairy in the male, less so in the female.

Length 13½–15 mm.; width 8 mm.

*Hab.* Natal (Durban, Newcastle), Transvaal (Rustenburg).

In two female examples from Rustenburg, the prothorax has the whole of the median part fuscous.*

### Anomala phthysica, n. spec.,
### Plate XLI., fig. 40.

Testaceous, with the posterior part of the head slightly infuscate, and having on the elytra a triangular black patch extending on the base as far as the fifth stria on each side and tapering into a sutural border at about the median part; tarsi piceous brown in some examples; clypeus nearly parabolic, very closely and deeply punctured; the anterior part of the head is equally closely punctured, but the punctures on the posterior part are regular and not so closely set; the anterior margin is only moderately reflexed; prothorax normally shaped, not fringed laterally with hairs, indistinctly aciculate, and without any impressed median line; scutellum indistinctly aciculate; elytra with deep, somewhat regular series of punctures, the intervals of which are very plainly costate; the juxta-sutural interval, instead of being filled with numerous irregular punctures, is distinctly costate, and the irregular punctures are restricted to the basal part; pygidium very closely punctate; pectus very little villose; anterior tibiæ bi-dentate outwardly, inner claw of the anterior and intermediate tarsi not broad, and cleft in the male. Female unknown to me.

Length 12–13 mm.; width 6–6½ mm.

* This variable species may prove to be identical with *A. ustulata*, the armature of the males being similar.

*Hab.* British Bechuanaland (Range), Southern Rhodesia (Salisbury; between the Zambesi and the Limpopo Rivers).

### Anomala ovampoa, n. spec.

Piceous red, with a greenish bronze sheen; clypeus broadly rounded laterally, sub-retuse in front where it is only slightly reflexed, very closely and roughly punctured, head also roughly punctured from the transverse impressed line to the base; palpi and antennæ piceous red with the club of the latter flavescent; prothorax obliquely attenuate laterally from about the median part to the apex, and nearly straight from the middle to the posterior angle, covered with very closely set and deep round punctures separated from one another by a space equal to one of the punctures, and having in the centre a longitudinal smooth area; scutellum with fine scattered punctures and a smooth median area; elytra of the normal shape, and having the three first intervals on each side carinate, sub-tectiform, and smooth, in the third interval the pluriseriate punctures reach only to about one-fifth of the length, the punctures of the striæ are somewhat deep and regular; the pygidium is covered with small but deep foveate punctures somewhat closely set; the pectus is moderately densely villose; the anterior tibiæ are bi-dentate outwardly, and in the female, the only sex known to me, the outer claw of both the anterior and intermediate tarsi are deeply cleft and somewhat broad.

Length 11 mm.; width 6 mm.

*Hab.* Ovampoland.

This species resembles very closely *A. senegalensis*, the ♀ of which is unknown to me; but the costæ on the elytra are not aciculate, and the punctures on the second and third intervals are more numerous and extend further from the basal part.

### Anomala dita, n. spec.,
### Plate XLI., fig. 41.

This species is very closely allied to the preceding one, but a ittle more robust in proportion to its size. The colour varies between piceous red and reddish bronze; the shape of the clypeus is the same, and the sculpture of the whole head is somewhat roughly shagreened, but not quite as strongly as in *A. ovampoa;* the punctures on the prothorax are finer, less deep, more scattered on the discoidal part, and although being as numerous laterally, they are less rugose there; the shape of the elytra is normal, but

they have along the outer margin and under the humeral callus an elongate, raised, smooth area, more conspicuous than in the other South African species; the three first intervals of the elytra are sub-tectiform, and more or less distinctly plicate transversely owing to the punctures in the striæ being transverse, the punctures on the other striæ are deep and regular, in the third intervals the pluri-seriate punctures reach only to about one-sixth of the length, and the scutellum is deeply and closely punctured; pygidium completely covered with equi-distant, closely set, deep punctures; anterior tibiæ bi-dentate outwardly; outer claws of the anterior and intermediate tarsi very broad and slightly cleft in the male, less robust and more deeply cleft in the female.

Length 11–11½ mm.; width 5¾–6 mm.

*Hab.* Southern Rhodesia (Salisbury, Enkeldoorn).

ANOMALA CASTANEA, Fähr.,
Plate XLI., fig. 44.
Insect. Caffrar., ii., p. 61.

Æneous or reddish bronze, with the sides of the prothorax, the pygidium, under side, and femora testaceous. Similar in shape and size to *A. ovampoa* from which it differs in the very faintly aciculate prothorax, the finer and closer punctures of the scutellum, the deeper punctures of the striæ of the elytra the three first intervals of which are narrower and therefore sharper, and the second and third intervals deeply pluri-serrate from the base to about one-quarter of the length; pygidium closely punctured; pectus very little pubescent; anterior tibiæ bi-dentate outwardly; inner claw of the anterior and intermediate tarsi slightly cleft in the male, the inner anterior claw being very broad. Female unknown.

Length 11 mm.; width 6 mm.

*Hab.* Transvaal (Lydenburg, Rustenburg).

ANOMALA CAFFRA, Burm.,
Plate XLI., fig. 42.
Handb. d. Entomol., iv., 1, p. 266.

Chestnut-brown, with a conspicuous metallic sheen, prothorax especially bronze green, under side and femora brick-red, but also metallic; sculpture and shape of the clypeus and head similar to those of the preceding species; prothorax having also the same shape, finely and equally punctured in the manner of *A. dita*, but with the punctures rounder and less closely set on the sides; the

shape of the elytra is also that of *A. dita*, but there is no conspicuous smooth callus on the outer margin at a short distance from the base, the first three dorsal intervals are not so sharply costiform, all the punctures of the striæ are much shallower and rounder, especially on the first three dorsal ones and on the second and third intervals the pluri-seriate punctures reach to about the median dorsal part; the pygidium is of the same colour as the elytra and deeply and closely punctate; the pectus is moderately densely pubescent; the anterior tibiæ are bi-dentate; the inner claw of the anterior and intermediate tarsi are deeply cleft in both sexes, but the former in the male is not broad.

Length 11–12½ mm.; width 6–7½ mm.

*Hab.* Natal (Durban).

ANOMALA RESPLENDENS, Fähr.,
Plate XLI., fig. 43.
Insect. Caffrar., ii., p. 60.

Extremely closely allied to *A. caffra;* the colour is the same, although a little more greenish, but the under side and femora are of the same colour as the upper side; the punctures on the prothorax are round but a little more closely set, and on the elytra the fifth punctate stria is obliterated from the base to about the median part. This, however, may prove to be accidental. The main distinctive characters are found in the much broader outer claw of the anterior tarsi, which is very deeply cleft in the inner side in the male (the intermediate one is also very deeply cleft, but is not broad), and in the shape of the genital armature of the male, the clasps of which are less elongate, more sloping, and the lower process of which is very much longer and curves upwards.

Length 12 mm.; width 7 mm.

*Hab.* Natal (Frere).

Fahrœus' type is a female.

ANOMALA DORSATA, Fähr.,
Plate XLI., fig. 46.
Insect. Caffrar., ii., p. 63.

*A. vittipennis*, Fahr., *loc. cit.*, p. 64.

*A. marginicollis*,* Arr., Ann. Magaz. Nat. Hist., 1899, iv., p. 119.

Testaceous, with the head and tarsi piceous red; on the prothorax are two more or less faint fuscous patches which occasionally invade

* Mr. Arrow informs me that he believes *A. marginicollis* to be a variety of the very variable *A. dorsata*.

the whole of the discoidal part, the elytra have a fuscous band along the scutellum and the suture, and the outer margin is also slightly infuscate, but as often as not the surface is infuscate with the exception of a somewhat broad supra-marginal testaceous band; clypeus sub-parabolic but a little obtuse in front, and slightly attenuate and rounded laterally in the male, less so in the female, very closely and somewhat roughly punctate all over the head; prothorax covered with deep, round, very closely set punctures; elytra very deeply punctato-striate and with all the intervals distinctly costate and smooth, on the second interval there are only a few punctures near the base, the inner claw of the anterior and intermediate tarsi is cleft in both sexes, and the anterior one is very broad in the male; the pygidium in both sexes is covered with almost confluent, sub-scrobiculate, somewhat deep punctures, and the abdomen is very little pubescent; the anterior tibiæ are bi-dentate in the female, but have a third short basal angular tooth in the male.

Length $10\frac{1}{2}$–13 mm.; width 6–$7\frac{1}{4}$ mm.

*Hab.* Southern Rhodesia (between the Zambesi and Limpopo Rivers, Salisbury, Mazoë, Buluwayo), Transvaal (Pienaars River).

The examples with testaceous elytra and sutural infuscate band resemble very much *A. phthysica*, but the males are at once distinguished by the broader inner anterior claw.

ANOMALA FUSCICEPS, Fähr.,

Plate XLI., fig. 45.

Insect. Caffr., ii., p. 62.

Pale testaceous, with the head chestnut-brown, shining, but not metallic, and having the suture and the outer margin of the elytra very narrowly darker; head very closely and deeply punctured, clypeus shagreened, distinctly attenuate laterally towards the anterior part which is sub-truncate with the angles broadly rounded; prothorax of the normal shape and having only seven setigerous punctures along the outer margin, covered with dense, deep, round punctures, slightly cicatricose, and smaller and still more closely set along the anterior margin, in the male there is a very narrow smooth longitudinal band, and a short, impressed line in the female; scutellum with punctures of nearly the same size as those on the prothorax, but a little less closely set; elytra a little elongate and not much ampliate laterally past the median part in the female, deeply punctato-striate and with the four juxta-sutural intervals

plainly costate; in the male only the basal part of the second and third intervals are pluri-punctate, but the number and extent of these irregular punctures vary; pygidium covered with closely set, deep punctures; pectus very slightly pubescent; anterior tibiæ bi-dentate outwardly in both sexes; inner claw of anterior and intermediate tarsi cleft, the anterior one of the male broad.

Length 10½–13¼ mm.; width 6–6¼ mm.

*Hab.* Southern Rhodesia (Mashonaland, Zambesi River), Northern Damaraland, Orange River Colony (Bothaville).

The examples from Mashonaland, Zambesi, and Damaraland are a little redder and more metallic than the others.

### Anomala delagoa, n. spec.,

Plate XLI., fig. 47.

Flavescent, with the head, the discoidal part of the prothorax the scutellum and the tibiæ reddish brown with a strong metallic sheen, which is also, but in a much lesser degree, noticeable on the elytra; head deeply and very closely punctured, the punctures are more irregular on the clypeus, which is therefore more shagreened, and is plainly attenuate laterally with the angles broadly rounded, and the anterior part sub-truncate; prothorax a little broader at the base than across the median part, and covered with somewhat closely set, round, moderately shallow punctures equi-distant all over the surface; scutellum with somewhat scattered, round, moderately deep punctures; elytra a little shorter in proportion to the size than any of the South African species, being only twice as long as the prothorax, deeply punctato-striate, especially the first four striæ, the four intervals of which are distinctly costate; the third interval is pluri-punctate from the base to about one-fifth of the length; the pygidium is closely punctate, and the pectus only slightly villose; anterior tibiæ bi-dentate outwardly; inner claw of the anterior and intermediate tarsi cleft in both sexes, the anterior inner claw is very broad in the male.

Length 10–10½ mm.; width 5¾–6 mm.

*Hab.* Mozambique (Lourenço-Marquez).

### Anomala parca, n. spec.

Testaceous, with the head reddish brown, the prothorax has a very broad fuscous sub-metallic patch covering the whole of the central part, and also a round spot close to the supra-lateral fossa which, as often as not, coalesces with the central patch; elytra with

the suture and all the dorsal striæ infuscate but with the seven costate intervals testaceous; clypeus and anterior part of the head strongly and closely shagreened, basal part of the head closely punctured; the clypeus is sub-truncate in front and moderately rounded laterally; prothorax of normal shape, and with the supra-lateral fossa conspicuously deep, it is covered with very closely set equi-distant, moderately deep, round punctures; scutellum somewhat closely punctured; elytra plainly costate on the dorsal part; the costæ are not carinate, and are smooth, the punctures in the striæ are deep and somewhat irregular towards the sides, and the second interval is filled with punctures irregularly disposed from the base to four-fifths of the length; pygidium sometimes slightly infuscate, covered with coalescing, shallow, somewhat cicatricose small foveæ; pectus very little pubescent; anterior tibiæ bi-dentate; claws of anterior and intermediate tarsi cleft in the female, the only sex I know.

Not unlike the female of *A. dorsata*, but with the elytra more ampliate laterally behind, and easily distinguished from all the other South African species by the irregular punctuation of the second interval extending from the base to four-fifths of the length.

Length 11½–12½ mm.; width 6–7 mm.

*Hab.* Southern Rhodesia (Salisbury).

(*Species which I have not been able to identify.*)

ANOMALA BRUNNEA, Klug,

Monatsb. Berl. Acad., 1855, p. 659; Peter's Reis., p. 259.

"Reddish brown, head and prothorax with an æneous sheen, vaguely and finely punctate, elytra striato-punctate.

Length 5 lin.

One example from Tette (Mozambique). Similar to *A. vetula*, Wiedem., from the Cape, but smaller and relatively narrower. The colour is a tolerably bright brown-red, not without metallic glance on the head and prothorax which are furnished with fine scattered punctures; the head is marginate, the margin not reflexed; the elytra have rows of punctures, the interspaces being flat, provided here and there, but always sparely, with impressed punctures; the under side and the legs are like the upper side brown-red, only somewhat darker. The tibiæ of the fore-legs are bi-dentate, the external broader claw is cleft."

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ANOMALA SEBAKUANA, n. spec.

Very pale straw-colour with the head reddish or brownish red; prothorax with two discoidal black patches, suture of elytra black; pygidium with a broad, triangular fuscous, or black, basal patch; clypeus parallel, truncate in front, closely punctured like the frontal part; prothorax plainly finely and closely punctured; elytra with the same sculpture as *A. probativa*, with which it is closely connected, the genital armature being very, yet not quite similar, apart from its smaller size it is also distinguished from the latter by the foveolato-punctate

ANOMALA LUCIDA, Klug,

Monatsb. Berl. Acad., 1855, p. 659; Peter's Reis., p. 259.

"Obscurely ferruginous, with an æneous sheen on the upper side; head, thorax, and scutellum with punctate impressions; elytra striato-punctate.

Length 4½ lin.

One example from Sena (Mozambique). Somewhat smaller than *A. brunnea*, but otherwise similarly shaped. Dark brown, metallic above; head, prothorax, and scutellum more strongly and more densely punctate; the elytra with rows of punctures, the interspaces scarcely raised and smooth; anterior tibiæ bi-dentate; claws as in *A. brunnea*."

ANOMALA LUTEA, Klug,

Monatsb. Berl. Acad., 1885, p. 659; Peter's Reis., p. 258.

"Ovate, yellowish testaceous, head, margin of prothorax, suture of elytra and tarsi ferruginous.

Length 9 lin.

Very like *A. pallida*, Fabr., only a little larger. The yellow colouration extends over almost the whole body, only the head, with the exception of the antennæ, the dorsal surface of the prothorax, the suture of the elytra, their apical margin, and the tarsi are brown; the area between the eyes is a little more deeply impressed, and the prothorax more deeply punctured than in the case of *A. pallida;* the elytra are more frequently and more irregularly punctured, especially in the intervals; the brown colouration of the suture is only feebly indicated; and that of the margin is limited to the apex of the elytra; anterior tibiæ bi-dentate. This species belong to the Sub-genus *Heteroplia* of Burmeister. Several examples from Tette (Mozambique)."

ANOMALA PLAGIATA, Burm.,

Handb. d. Entomol., iv., 2, p. 496.

"Testaceous, shining, with the head, the disk of the prothorax, and a broad sutural patch on the elytra black; margin fuscous, tarsi infuscate.

Length 6 mm. ♂.

From Kaffirland. Collection of Mr. Germar. Shorter than *A. vetula*, but with the same shape; the head is somewhat broader, and the anterior margin less reflexed; club of the antennæ very thick and broad; head and prothorax finely punctate, the former

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pygidium, which is only aciculate in comparison, especially in the median part, in *A. probativa;* inner claw of anterior and intermediate tarsi cleft in both sexes. Length 11½–11¾ mm.; width 5⅔–6 mm.

*Hab.* Southern Rhodesia (Sebakwe).

ANOMALA OPACICOLLIS, n. spec.

This species is also very closely allied to *A. probativa*, and the shape of the genital armature of both species is the same, but the colour is paler and the body is a little more elongate in proportion to the size; the prothorax, which is somewhat

somewhat roughly; elytra finely striate; ground colour, brownish yellow, the head, the middle of the prothorax, the region of the suture and the outer margin, the outside of the tibiæ and the tarsi blackish; anterior tibiæ bi-dentate."

This species, which I have not been able to identify, should come in the same group (*Hoplopus*) as *A. vetula*, which group comprises all the species, the male of which has the claws of the anterior and intermediate tarsi simple.

ANOMALA RUSSATICEPS, Fairm.,
Annal. Soc. Entom. d. France, 1888, p. 179.

"Ovate, convex, slightly ampliate behind, pale fulvous, shining, head and tarsi somewhat light chestnut, outer teeth of anterior tibiæ fuscous, suture and outer margin of elytra, posterior margin of the prothorax, whole sides of the scutellum very narrowly infuscate. Ovambo.

Length 13 mm.

This *Anomala* resembles very closely *A. pallida*, Fabr., but it is a little smaller, the head is more convex, less rugose, more narrowly emarginate in the anterior part; the prothorax is almost opaque; the striæ of the elytra are more finely and more densely punctured, and are geminate; lastly, the claws of the anterior tarsi are much less unequal, and the larger one is more sharply cleft at the tip."

ANOMALA DISTANTI, Arrow,
Transact. Entom. Soc. Lond., 1899, p. 258.

"A close ally to the preceding species (*A. transvalensis*), but less distinctly punctate, prothorax very finely punctate, strongly constricted in front and with the emargination of the anterior margin narrow; elytra not very deeply lineato-punctate; under side sparingly hairy, hind tibiæ and tarsi of all the legs rufous.

Length 18 mm.

♂. Outer claws of anterior legs unequally cleft, basal teeth of the anterior tibiæ short and curved.

♀. A little larger; outer claws of anterior and intermediate tibiæ equally cleft, basal tooth of the anterior tibiæ long and straight.

*Hab.* Transvaal (Pretoria).

This species exactly resembles the preceding one in size and colouration, but it is distinguished by its less distinct puncturation, the narrower emargination of the prothorax, the paler colour of the middle tibiæ, and the less abundant pubescence upon the sternum.

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of a fleshy colour in the centre, is opaque, and so is the scutellum; the punctures on the elytra are less deep; the female only has all round the pygidium a conspicuously dense fringe of very long, pallid hairs, and the propygidium is also densely but briefly pubescent; inner claw of anterior tarsi cleft in both sexes. In one example only among the nine which I examined was the fuscous sutural band of the elytra obliterated. Length 14–14½ mm.; width 7–7¼ mm.

*Hab.* Southern Rhodesia (Sebakwe).

I have separated them only after a careful comparison of many specimens from various collections."

## NONGOMA, n. gen.

Mentum ovate laterally and with the apical part a little more attenuate than in *Anomala*, but similarly impressed in the outer face; palpi also similar in shape; maxillæ not dentate but produced into an inflexed transverse lobe emarginate in the middle; the shape and sculpture of the body are similar to those of *Anomala*, but the hind tibiæ are gradually ampliated triangularly from the base to the apex, and the two apical spurs are more laminate, more parallel and longer; the club of the antennæ, which are nine-jointed, is in the male as long as all the other joints taken together, the inner claw of the anterior and intermediate tarsi is simple in both sexes, and all the claws are of nearly equal length.

### Nongoma calcarata, Arr.,
Trans. Entom. Soc., 1899, p. 259.

Either pale testaceous with two slightly fuscous supra-lateral longitudinal patches on the prothorax, or totally testaceous, but with the head infuscate, or having two large longitudinal fuscous patches on the prothorax and a very broad discoidal one extending from the suture of the elytra to about the median dorsal part, as well as one or two narrow ones above the outer margin; head deeply but not roughly punctured, scutellum straight laterally, arcuate in front and with the margin distinctly reflexed, it is covered with round not closely set punctures, and is not at all shagreened; in some examples the punctures are almost indistinct on the head and on the clypeus; prothorax punctulate with the punctures set more closely on the sides, and having occasionally a median longitudinal impressed line; scutellum punctulate; elytra deeply punctato-striate, with the intervals costulate in the dorsal part and with the irregularly pluri-seriate punctures on the third interval reaching to a very short distance; pygidium densely cicatricoso-punctate; pectus very densely hairy; anterior tibiæ bi-dentate outwardly, apical tooth very long and nearly straight.

This species is very variable not only in colouration but also in the sculpture of the head, prothorax, and scutellum, which, in some examples, are hardly distinctly punctulate.

Length $12\frac{1}{2}$–$14\frac{1}{2}$ mm.; width 7–8 mm.

*Hab.* Cape Colony (Kowie, Port St. John), Natal (Durban), Mozambique (Lourenço-Marquez).

## GEN. PERIPOPILLIA, Kolb.,
Stett. Entom. Zeit., 1894, p. 208.

Mentum and palpi of *Popillia*, but the apical joint of the labial palpi is a little elongato-ovate, and distinctly impressed outwardly; the maxillæ are armed with five sharp robust teeth, the shape of the clypeus is that of *Popillia*, but the prothorax is that of *Anomala*, and is likewise marginate all round, the scutellum is also short, but broader than in the last-mentioned genus; the elytra are shaped more like those of *Popillia*, but they are distinctly costate and less plane; the pygidium is more declivous, and is glabrous; the abdominal segments have no bands of appressed hairs and the mesosternum is simple; inner claw of anterior and intermediate tarsi cleft in both sexes, that of the anterior ones conspicuously broad in the male; legs short and massive as in *Popillia*, but with the intermediate and posterior tarsi more slender and like those of the metallic species of *Anomala*.

This genus is a good form of transition between *Anomala* and *Popillia*.

### PERIPOPILLIA BASALIS, Blanch.,
Catal. Coll. Entomol., 1850, p. 191.

? *P. nitidicollis*, Klug, Monatsb. Berl. Acad., 1855, p. 659; Peter's Reis., p. 259, pl. xv., fig. 6.

*P. Oberthüri*, Kraatz, Deutsch. Entom. Zeitschr., 1892, p. 184.

Head, prothorax, and scutellum bronze green, shining; under side and legs dark blue; the elytra are almost completely dark blue with the exception of a very narrow basal reddish testaceous line, or they have a very broad testaceous yellow basal band reaching to beyond one-third of the whole length, but not invading the suture; in some species they are violaceous or testaceous yellow with the exception of the suture and of a supra-marginal dark blue band beginning at about one-third of the length; clypeus roughly punctured, somewhat blunt in the anterior part, and slightly emarginate in the middle of it, broadly rounded laterally, and with the margin moderately reflexed; prothorax finely and somewhat closely punctulate on the sides and along the anterior margin, but very slightly, and sometimes not at all, on the median dorsal part; scutellum broader than long and sparsely punctate; elytra very plainly costate, with the intervals narrowly but deeply punctato-striate, the eight dorsal costæ, which include the sutural one, are tectiform and smooth, except that the fifth has a series of deep punctures extending from past the median part to the apex, and the seventh a similar row beginning near the humeral

callus and reaching to the median part; pygidium deeply and closely punctured, glabrous except for three or four setulose hairs set in an oblique depression on each side; the propygidium and the exposed area of the dorsal part of the abdominal segments are closely and deeply punctured, and the ventral segments have shallow, somewhat indistinct cicatricose imprints; legs short, robust, and distinctly punctate except the upper side of the anterior tibiæ.

Length 9¼–10 mm.; width 5½–6 mm.

*Hab.* Southern Rhodesia (Buluwayo, Salisbury). Occurs also in German East Africa and in Zanzibar.

The clasps of the genital armature of the male are very different in shape from those of *Popillia bipunctata* and *P. major*, and very closely resemble those of *Anomala dorsata*, Fähr.

*P. nitidicollis*, Klug, is perhaps a varietal form in which the whole of the elytra is suffused with testaceous yellow.

## Gen. POPILLIA, Serv.,

Encyclop. Méthod. x., 1825, p. 367.

Mentum ovoid laterally from the base to three-quarters of the length, incised there and narrower and sub-parallel thence to the apex the angles of which are rounded, the anterior part is broadly and deeply scooped in the middle, in the outer face it is somewhat convex from the base to the median part, and deeply impressed thence to the apex, labial palpi short, somewhat massive, intermediate one nodose, the apical one nearly as long as the other two taken together, and deeply impressed laterally; mandibles very robust, and provided with three strong arcuate teeth, the two lower ones of which are double and connate at the base; maxillary palpi moderately long, apical joint sub-cylindrical and tapering a little towards the apex where it is truncate; labrum very short, emarginate in the centre, mandibles laminiform, projecting a little beyond the labrum with the inner edge incised, and the upper outer one emarginate; clypeus broader than long, being about half the length of the head, truncate at apex with the angles slightly rounded; eyes somewhat prominent, divided into equal parts in the anterior part by the canthus of the genæ; prothorax very little convex, very attenuate obliquely laterally from the median part to the apex, sub-parallel from the median part to the basal angle which is sharp, obliquely sinuate thence along the base to a short distance from the scutellum where the median basal part is completely emarginate-and arcuate; scutellum elongate, sharply ogival; elytra as broad as

long, very little attenuate towards the apical part, plane or nearly so in the dorsal part, and very little sloping on the sides, punctato-striate in the dorsal part and oftener than not punctate only on the sides, intervals plane or moderately costate; the greatest part of the pro-pygidium is hidden by the elytra, the pygidium is very sloping; the legs are short, robust, the posterior coxæ are sharply carinate semi-circularly on the outer part and project distinctly beyond the elytra; anterior tibiæ bi-dentate, but with the basal tooth very blunt or merely angular; they are carinate on the upper side and have an inner apical spur; the joints of the tarsi are compressed, strongly bristly underneath, the fifth joint is as long as the four preceding joints taken together; the claws are hinged, double and parallel, the outer one is nearly as long as the inner but a little more slender, and the latter is incised in both the anterior and intermediate tarsi in both sexes, although in the male the incision is very slight or often invisible; the pygidium has two patches of white hairs or is sometimes completely hairy, and so are the sides of the abdomen; the prosternum is produced into a compressed aculeate process conspicuous or not; antennæ nine-jointed.

The two sexes are very much alike, but the male is easily identified by the broader inner claw of the anterior tarsi.

This genus has only one representative in South Africa, but is numerously represented in the rest of Africa.

Herr A. J. Kolbe has divided the genus into several sub-genera (Stett. Ent. Zeit., 1894, p. 207). One of them, *Peripopillia*, has, I think, a generic value, and is retained as such; but the only distinction between *Popillia* and the genus *Nannopopillia* created for *Popillia minuscula*, Har., are the shape of the clypeus, the absence of a very projecting mesosternal process, and the fissured inner claw of the intermediate tarsi in the male; the basal part of the pygidium is hairy transversely. Mr. Arrow has included in this genus another South African species which certainly belongs to *Popillia*, and in which the mesosternum does project, although not quite as much as in the species of the Sub-genus *Popillia*, which has the inner claw of the intermediate tarsi also incised in the male. This last character is found in *Popillia biguttata*, although it is not conspicuously shown, and I have also met with it in some species from the Gold Coast, *P. femoralis* among others; the buccal organs are similar to those of *Popillia*, and so, for that matter, are those of *Nannopopillia*, so that the latter's distinctive characters are after all reduced to the slope of the clypeus and the sharper outer teeth of the anterior tibiæ.

The species of *Popillia* are found in and on flowers, and also on the trees in daytime.

*Key to the Species.*

Mesosternal process very long, compressed, with a sharp upper edge; æneous on the upper side with the elytra reddish yellow or pale testaceous with a very broad discoidal black band; intervals of elytra plane .. .. .. .. .. .. .. .. .. .. .. .. .. .. .. .. *bi-punctata.*

Mesosternal process moderately long, compressed, bluntly triangular; coppery on the upper side with the elytra flavous; intervals of elytra convex .. .. .. .. .. .. .. .. .. .. .. .. .. .. .. .. *laetans.*

Mesosternal process short, cuneiform; æneous on the upper side with the elytra pale testaceous in the anterior part, and black in the posterior.. .. .. .. .. .. .. .. .. .. .. .. .. .. .. .. *major.*

POPILLIA BIPUNCTATA, Fabr,,

Mantiss., Insect., i., 1787, p. 25.

*P. limbata*, Boh., Insect. Caffr., ii., p. 59.

*P. apicalis*, Kraatz, Deutsch. Entom. Zeitschr., 1892, p. 190.

Glabrous on the upper side; head, prothorax, and scutellum coppery red, or æneous, elytra completely yellowish red, or testaceous yellow with the median discoidal part slightly infuscate, or distinctly black, leaving only a somewhat narrow marginal yellowish band along the outer and posterior margins, along the base and also along the suture up to about the median part; pygidium with two patches of whitish appressed hairs, the abdominal segments are banded with similar hairs, the mesosternum is entirely covered with them, and the posterior femora have a similar band; under side and legs bronze, or bronze-black; clypeus broader than long, truncate at the tip and with the outer angles rounded, closely shagreened, head very closely punctured, but not rugose; prothorax distinctly attenuate laterally in front from the median part, a little slightly obliquely ampliate from the middle to the sharp basal angle, conspicuously tri-sinuate along the base, the sinuations of equal depth, marginate in front and laterally, but only for a third of the length along the base, not very convex and covered with very closely set round punctures on the sides and on the anterior part, but impunctate in the posterior median part; scutellum longer than broad and sharp at tip, impunctate; elytra as broad as long, plane with the humeral and apical calluses not much developed, deeply punctato-striate except on the three or four first dorsal striæ, intervals plane or nearly so, and impunctate; propygidium partly covered by the elytra, closely punctate; pygidium sub-scabroso-punctate; femora hardly punctate, tibiæ more so.

Length 11½–13 mm.; width 6½–8 mm.

This species varies much in the coloration of the elytra, but it is not difficult to find intermediate forms between those with concolorous wing covers and those with a very broad black discoidal band; this latter is the *P. limbata*, Bohem., and any doubt as to its being identical with *P. bipunctata* is at once removed by the examination of the genital armatures of the male, which are absolutely similar.

*Hab.* Cape Colony (Knysna, Graham's Town, Uitenhage, Kimberley, Bedford, Somerset East, King William's Town, Fort Beaufort, East London, Port St. John's); Natal (everywhere); Orange River Colony and Transvaal (the whole territory), Mozambique; probably the whole of Eastern Africa; occurs also on the West Coast, teste Kolbe.

### Popillia laetans, n. spec.

Head, prothorax, scutellum, and legs coppery, under side darker bronze; elytra flavous with the suture, and a narrow marginal line bronze; pygidium with two transverse patches of appressed white hairs, abdominal segments with a lateral band of similar hairs; this species is very much like *Popillia bipunctata*, the clypeus is, however, more rounded laterally, the shape and sculpture of the prothorax is the same, but the scutellum is shorter, more triangular and closely punctured; the elytra are more roundly ampliated laterally at about the median part, and have a deep, long, and broad impression reaching from the seventh stria to the outer margin, the striæ are deeper and more deeply punctured, the intervals are plainly costate; the basal outer tooth of the anterior tibiæ is short and moderately sharp, but the apical one is very long and sub-horizontal, and the outer claw of the intermediate tarsi is slightly cleft; the mesosternum is produced into a compressed obtusely triangular process, as broad at the base as long; pygidium closely punctate in the centre, strigose laterally, and not quite so horizontal as in *P. bipunctata*.

Length $9\frac{1}{4}$ mm.; width $5\frac{1}{2}$ mm.

*Hab.* Southern Rhodesia (Manica).

### Popillia major, Arr.,

Annals and Magaz. Nat. Hist., 1899, vol. vi., 7th ser., p. 120.

Head and prothorax coppery, under side and legs bronze-black with the tarsi piceous red; elytra testaceous yellow with the whole of the posterior part bronze-black, and having also a narrow sutural bronze line, glabrous on the upper side, and with two transverse patches of

greyish-white hairs on the basal part of the pygidium, the pectus is very hairy, and the sides of the abdomen only moderately so; head rugose; clypeus very closely shagreened, broader than long, subtruncate at apex with the angles slightly rounded; prothorax closely punctured, the punctures are nearly equi-distant, a little denser along the anterior margin, and slightly confluent on the sides, the base is not marginate; scutellum very closely punctured; elytra plane, deeply striate, the striæ somewhat deeply punctured except on the two juxta-sutural ones, intervals costate and tectiform in the dorsal part, and impunctate, apical callus very conspicuous; pygidium covered with nearly confluent punctures; legs somewhat villose; mesosternal process short.

Length 9 mm.; width 5½ mm.

*Hab.* Transvaal (Lydenburg, Pretoria, teste Arrow).

In one of my examples the whole of the posterior half of the elytra is black, and there is also a humeral black patch on each side.

## Gen. PHARAONUS, Blanch.,

Cat. Collect. Entom., 1850, p. 201.

Mentum elongate gradually narrowed from the base towards the apex, but a little ampliate towards the base, straight at the tip with the outer angles slightly sloping obliquely, not very convex nor impressed towards the apex on the outer face and clothed with a very long pubescence, palpi as in *Popillia;* maxillæ robust, hairy, not dentate, but with the upper part transverse and bi-incised with the intervals between the two incisions rounded, except the inner one which is sharper; head with the canthus of the genæ greatly developed and the eyes very large, clypeus hollow, with very highly raised margins and very broadly rounded laterally; prothorax as in *Popillia*, but not at all marginate along the base, scutellum as broad as long, and not sharp at apex; elytra and legs as in *Popillia;* pygidium declivous and a little convex and with the white hairs not divided into two patches in the male; prosternum slightly knobby between the femora, but not projecting; club of the antennæ curved and longer than all the other joints taken together. The distinctive characters of this genus are the hollowed clypeus with a very reflexed margin, the non-marginate base, and the absence of an elongate mesosternal process; the two outer teeth of the anterior tarsi are longer and sharper than in *Popillia.*

The genus is represented also in Egypt and in Mesopotamia.

PHARAONUS SUBVITTATUS, Burm.,

Handb. d. Entomol., iv., i., 1844, p. 307.

Head and prothorax bronze-green, moderately shining, under side and legs metallic black, antennæ black; scutellum bottle-green, elytra pale testaceous with the suture and outer margin narrowly edged with fuscous bronze, and having in the posterior part either a very broad bronze black band reaching to the apex and emitting two or three longitudinal bands reaching to about the median part, or having only these three bands and no transverse patch; the upper side is glabrous, but the upper half of the pygidium is clothed with dense appressed greyish white hairs, and the abdominal segments and also the pectus are sparingly pubescent; clypeus a little broader than long, obtuse in front and with the angles very broadly rounded and the margins strongly reflexed, it is darker than the head and very closely shagreened like the latter, but the granules are smaller still; prothorax somewhat convex and not marginate along the base; covered with deep, round punctures very closely set; scutellum as wide as long, broadly ogival, rounded at the tip, and deeply and closely punctured; elytra as broad as long, distinctly sinuate laterally at about one-fourth of the length, broader from there and only very slightly ampliate in the median part, plane with the humeral callus only conspicuous, not very deeply punctato-striate on the dorsal part, but more so on the sides, and with the intervals plane on the dorsal part, but somewhat costulate laterally; legs somewhat deeply punctured outwardly, femora sparingly pubescent; tarsi piceous.

The shape and size of the posterior black transverse patch on the elytra varies in almost every example which I have seen; it even disappears altogether, leaving only a faint trace of two longitudinal slightly infuscate lines.

Length 7–7½ mm.; width 4½ mm.

*Hab.* Natal (Estcourt, Frere), Southern Rhodesia (Salisbury), Cape Colony (Graham's Town).

GEN. GNATHOLABIS, Ericks.,

Naturgesch. Ins. Deutsch. iii., 1847, p. 615.

Kraatz, Deutsch. Entomol. Zeitschr., 1892, p. 298.

Mentum quadrangular from the base to about the median part, incised laterally there and slightly narrower thence to the apex, which is very deeply scooped in the shape of a crescent, and edged with stiff bristles; the palpi are like those of *Popillia*, but the apical

one of the labial is a little longer; the maxillæ are robust and produced at the apex into a laminate, somewhat hollow process, curving and rounded at the top and having at its base three sharp horizontal teeth; clypeus nearly as long as the head, sub-parallel, truncate at the tip; prothorax longer than in *Popillia* and also narrower, a little ampliate laterally in the middle, sinuate past the median part and marginate all round; scutellum somewhat rounded at the apex; elytra a little more elongate than in *Popillia*, pygidium and legs similar; mesosternum without a projecting process.

This genus was indicated rather than characterised by Erikson for a Senegal species, owing to the curious form of its maxillæ. Dr. G. Kraatz, in his Monographic Revision of the Rutelid Genus *Popillia*, has given a fuller description of the generic difference.

Another species is known from the Gold Coast.

GNATHOLABIS BREVIS, Blanch.,
Catal. Coll. Entom., 1850, p. 178.

Head and prothorax metallic green, shining; elytra straw-colour, with a narrow sutural and marginal bronze band, as well as a humeral patch, and a somewhat dark but not infuscate median band on each side, this band is at times partly obliterated, under side dark bronze, antennæ, with the exception of the club which is black, palpi, and legs ferruginous; the elytra only are glabrous, the rest of the body, including the legs and the whole pygidium, is covered with a dense, flavescent villose pubescence; head very rugose, clypeus as long as broad, truncate in front, with the angles slightly rounded, and slightly ampliated in the median part of the sides; prothorax finely marginate except in the median part of the base, which is emarginate above the scutellum, covered with deep, closely set punctures, and having a very distinct median longitudinal sulcus interrupted in the centre; elytra slightly longer than broad, sinuate laterally in the anterior part, and ampliated for a short distance at about the median part, impressed transversely below the scutellum, the humeral and the apical callus are very distinct, the striæ are deeply punctured and the intervals are plane in the dorsal part, and impunctate; pygidium scabroso-punctate and completely covered with the appressed hairs (♀).

Length 9 mm.; width 5 mm.

*Hab.* Natal (Durban).

In this species the infuscate bands on the elytra varies very much; nearly wanting in some examples, they are very conspicuous in others, and reach from base to apex.

## TABORA, n. gen.

Mentum ovate laterally for two-thirds of the length, constricted and triangularly ampliated thence to the apex, where it is broadly and somewhat deeply emarginate in the centre, the outer angles are slightly rounded; the palpi are as in *Popillia*, but the maxillæ have at the upper end two long, falcate teeth, the outer one of which is very deeply bifid, and three other equally sharp, but horizontal at the base of the galea. The presence and the disposition of these teeth are the distinctive characters separating this genus from *Gnatholabis*, which has the clypeus and the prothorax similarly shaped and clothed also with long, appressed hairs. Kraatz (Deutsch. Entom. Zeit., 1892, p. 390), included the only species known among *Gnatholabis*, having not examined the mouth parts. Dr. Ohaus includes it in *Nannopopilia*, Kolb. (Stett. Entom. Zeit., 1897, p. 354), but the shape, the disposition, and number of the teeth of the maxillæ are different in *N. minuscula*, the only other species belonging to *Nannopopilia*, and so is the shape of the clypeus.

### TABORA LUDIFICANS, Ancey.,
### Natural. Sicilian, ii., 1883, p. 96.

Shining, head and prothorax brassy green; elytra flavous with an elongato-quadrate patch under the scutellum, the suture and a broad outer marginal band bottle-green or very nearly black; under side black, antennæ and legs brownish red; clypeus very slightly broader than long, straight laterally, nearly sub-parallel, truncate at the tip with the outer angles very little rounded, and the anterior margin reflexed, it is, like the head, finely rugose and plicate transversely; prothorax a little longer than broad, attenuated laterally in the anterior part for about one-third of the length, slightly emarginate thence to the outer angle which is sharp, marginate all round, the median part of the base is slightly sinuate, it is conspicuously plicate transversely with the folds very closely set, and is clothed with long, dense, decumbent yellowish hairs; scutellum broadly ogival, transversely plicate; elytra not broader in the median part than at the base, but plainly emarginate laterally between these two parts, not much narrowed from the median to the posterior part, plane in the anterior, but somewhat convex at about the median, deeply and regularly punctato-striate with the intervals convex, glabrous except for a few short hairs along the outer margin in the anterior part; propygidium partly uncovered, glabrous, pygidium a little convex, scabroso-punctate but completely covered with flavescent, very dense appressed hairs; all the segments of the

abdomen are covered all over with similar hairs, the pectus and thighs are very villose, but not the tibiæ which have a metallic sheen ; anterior tibiæ bi-dentate ; larger claw of intermediate tarsi of the male not cleft.

Length 7–7½ mm. ; width 3⅘–4 mm.

This pretty species is said to have originally come from the Zambesi River. I have not seen any examples from the South African area, and this description is made from Central African ones.

## Tribe PHÆNOMERIINI.

### Gen. PHÆNOMERIS, Hope,

Trans. Zoolog. Soc., 1825, p. 97.

*Eupyga*, Mannerh.

Mentum with a horny, briefly ciliate ligula edging the sides of the anterior part of the mentum, which is semicircular, with the outer face deeply impressed, almost excavate, it is ovate laterally from the base to past the median part ; labial and maxillary palpi short, basal joint of the latter very small, apical one with a deep, narrow, longitudinal groove outwardly ; maxillæ compressed narrowly, hollow at the tip and armed with a sharp, curved tooth at the apex, and three more on each side of the hollow part ; labrum projecting, broadly emarginate in the centre ; head somewhat small, clypeus broader than long, semicircular and marginate ; eyes moderately large, slit by the short canthus of the genæ above the median part ; antennæ ten-jointed, club as long as the five preceding joints taken together ; prothorax conspicuously narrowed laterally from about the median part to the apex, sinuate from the middle to the outer angle, where it is wider than across the middle, marginate all round except in the median part of the base, which is a little less sinuate there than on each side of it ; scutellum very long, triangular ; elytra wider at the shoulders than the base of the prothorax, and greatly narrowed laterally thence to the apical part, depressed, costate and striate and having the humeral callus prolonged for a third of the length into a triangular, raised smooth area, dividing conspicuously the dorsal costæ and striæ from the lateral ones ; propygidium covered only at the base by the elytra, pygidium horizontal ; abdominal segments fused together ; prosternum with a long aculeate process projecting between the intermediate coxæ ; hind femora thickened, anterior tibiæ with only one long, straight apical tooth, and having a slender but long inner spur ; intermediate and hind femora without diagonal

ridges or rows of bristles outwardly; tarsi a little compressed, moderately long, and somewhat robust, claws diverging, equal in length, and having underneath in the anterior and intermediate tarsi a tooth not as long, but nearly as much curved as the claw itself, but simple, slender, and not diverging, and of equal length in the posterior tarsi; hind tibiæ gradually dilated from base to apex, strongly ciliate there, almost lobate inwardly at the apex, and having a dense, inner fringe of hairs in the male, and provided with two long apical inner spurs in both sexes.

This aberrant genus of the *Rutelinæ* is the only one in which the claws of the anterior and intermediate tarsi are diverging and have underneath a strong tooth, much in the manner of the *Melolonthinæ*.

The genus includes three species, two of which are from the Sudan; one of these is also met with in South Africa.

*Key to the Species.*

Colour of the upper side cærulean, seldom green; prothorax and scutellum impunctate but for a few punctures along the outer margin of the prothorax, costæ of elytra impunctate .. .. .. *besckei.*

Colour of the upper side green, or golden green, elytra and pygidium hyacinthine or violaceous; prothorax and scutellum closely punctulate; costæ of elytra plainly punctured .. .. .. *magnifica.*

PHÆNOMERIS BESCKEI, Mannerh.,

Bull. Mosc., 1838, i., p. 35.

Lacord. Gener. Atl., pl. xxxiii., fig. 4.

*P. cyanea*, Blanch., Catal. Coll. Entom., ii., p. 203.

Shining metallic green or dark blue with the femora violaceous, and occasionally reddish; antennæ black, with the exception of the first joint, very shining, glabrous on the upper side; head small, clypeus much rounded in front, sharply marginate all round, very rugose, posterior part of the head less rugose than the anterior; prothorax conspicuously narrowed in the anterior part, sinuate laterally past the median, and broader at the base than across the middle, marginate all round but not in the centre of the base, and impunctate except along the outer margin; scutellum impunctate; elytra elongate, very attenuate laterally towards the apical part, narrowly striate with the striæ closely but not deeply punctate, the costate intervals are not very sharp in the dorsal part, but are more carinate laterally; propygidium and pygidium impunctate in the median part, but with scattered foveate punctures on the sides;

abdominal segments shining, glabrous except for a transverse row of setigerous punctures; mesosternum closely foveolato-punctate, slightly hairy, and produced into a very long, aculeate process; claws of anterior and intermediate tarsi with a tooth underneath.

Length 17½–19½ mm.; width 8¼–9 mm.

*Hab.* Transvaal (Rustenburg, Lydenburg), Natal (Durban), also German East Africa and Zanzibar.

The examples from Durban, Natal, have red femora. The colour of this handsome insect is very variable. Herr F. Ohaus (Stett. Ent. Zeit., 1898, p. 3), admits even of varieties which he names respectively, *nigrocyanea* for examples from Loangwa River (Barotseland), *rufipennis* from Mashonaland, and *opalina* from Usambara. He retains the variety *cyanea*, Blanch., for examples from Dar es Salam. But some examples from there and also from Zanzibar, which I saw, or I own, are much greener than those from the Transvaal or Natal.

### Phænomeris magnifica, Hope,

Plate XLIII., fig. 33.

Trans. Zoolog. Soc., 1825, p. 98, pl. xiii., fig. 6.

*? P. rufipennis*, Brancs. Jahr. Ver. Trencs., xix., 1897, p. 117.

Similar in shape to *P. besckei*, and very much rarer in South Africa than this species, but differing in the following characters: head and clypeus golden bronze, much more roughly scabrose, the former is much less rounded in the anterior part, and the anterior margin is more reflexed; the punctures cover the whole of the prothorax, but are more scattered and finer in the discoidal part, instead of being restricted to a narrow longitudinal space along the outer margin; the scutellum is plainly punctulate, and is only very slightly emarginate laterally near the base, whereas in *P. besckei* the sinuation there is conspicuous; on the elytra the sharp, tectiform costæ are deeply and somewhat closely punctured; in the examples that I have seen the elytra are hyacinthine pink, and the pygidium also, but the suture and the sides of the pygidium are either more violaceous or iridescent pale blue, and the punctures on the sides of the latter are much more scattered and less numerous; the apical abdominal segments have the same hue as the elytra. The shape of the genital armature differs very little from that of *P. besckei*.

Length 18 mm.; width 8 mm.

Hope's description, as amended by Burmeister, applies very well to this species, the metallic colour of the upper side being, however, less glowing than in the type.

## TRIBE ISOPLIINI.

### GEN. ISOPLIA, Burm.,

Handb. d. Entomol., iv., 2, 1855, p. 487.

Mentum ovate laterally from the base to two-thirds of the length, constricted near the point of insertion of the palpi, thence sub-obliquely ampliated towards the apical part, which is broadly but not deeply emarginate, and fringed with dense somewhat bristly hairs, the outer face is deeply and broadly foveate, and has very long and very stiff black bristles, it is impressed in the anterior part and convex thence towards the base; the maxillæ are long, robust, the upper lobe is produced into three long, sharply falcate teeth on each side, and has a pencil of long hairs at the tip, the last joint of the palpi is fusiform, slightly truncate at the tip; the mandibles are long, flat, truncate at the tip, very densely ciliate inwardly, and project slightly beyond the labrum which is horizontal, a little shorter than the clypeus, transverse, a little attenuated towards the apex, where it is slightly emarginate; clypeus a little more than twice as broad as long, straight in front, slightly rounded laterally, head twice as long as broad not separated from the clypeus by a suture, eyes moderately large, not quite evenly divided by the canthus of the genæ; antennæ short, nine-jointed, club as long as all the other joints taken together; prothorax narrowly marginate all round, longer than broad, very little sinuate in front, rounded laterally and also ampliate in the anterior part, and deeply emarginate from about one-third of the length to the basal angle which is slightly rounded, basal part obliquely prolonged towards the scutellum, but not angular in the centre, and narrower than the elytra; scutellum broad at the base, thence narrowed, long, sharply acuminate at the tip; elytra as broad as long, but short and barely reaching the propygidium which is very broad, plane on the disk, but with a conspicuous basal humeral callus, and a deep impression between it and the outer margin which is somewhat rounded laterally and more ampliated above the mesothoracic epimera; the latter are greatly developed, but do not project much beyond the outer margin; pygidium long, ovoid, sub-vertical, convex in the apical part; abdomen compressed laterally, the first five basal segments fused, penultimate one as broad as the four preceding and a little broader than the apical one; metasternum moderately broad, mesosternum very small; legs moderately long, posterior femora and tibiæ robust, somewhat short, the intermediate and posterior tibiæ with two conspicuous apical spurs and with transverse ciliate rows

on the outer side; anterior tibiæ also short and dilated, tri-dentate outwardly and with a long, terminal inner spur; claws of all the tarsi somewhat long, unequal, but simple, the more robust one a little longer than the other.

The singular insect included in this genus might, but for the presence of two apical spurs to the posterior tibiæ, be included in the *Hoplinicæ*. It is remarkable for the shape of the horizontal labrum, of the mandibles and of the compressed abdomen, as well as for the great development of the uncovered propygidium and pygidium. It is on that account not unlike some species of *Heterochelus*.

ISOPLIA LASIOSOMA, Burm.,
Handb. d. Entomol., iv., 2, p. 488.

Black, moderately shining, elytra more or less pale, testaceous yellow, and having a black patch on the humeral part and on each side of the scutellum, an arcuate transverse band in the centre, and an apical one connected along the outer margin with the median one; the head, prothorax, scutellum, margins of the pygidial part and the whole under side are covered with long hairs, greyish in the male, yellow in the female, the elytra are clothed with upright and shorter ones; clypeus and head closely granulose; antennæ with the basal joint and the club black, the other joints testaceous red; prothorax very closely cicatricoso-punctate, with the punctures nearly confluent and setigerous; scutellum with similar but finer punctures; elytra somewhat depressed in the middle on each side of the suture, not striate but having series of punctures somewhat geminate in the dorsal part and more irregular on the sides, the humeral callus is greatly developed, the apical one nearly forms the outer angle of the apical part which is obliquely truncated on each side of the suture, the latter is plainly raised; propygidium and pygidium covered with elongate, somewhat oblong punctures separated from one another by a space equal to their width, the propygidium has a long basal fringe of hairs, and so has the pygidium which is distinctly convex in the posterior part, somewhat knobby there in the female, and is densely hairy; the under side is also very densely hairy and deeply and closely punctured; the punctures are elongate; all the femora are deeply grooved at the apex; the tibiæ are short, very compressed, very obliquely truncate inwardly, sharply tri-dentate outwardly; claws long, slender, simple.

Length $8\frac{1}{4}$–$8\frac{1}{2}$ mm.; width $4\frac{1}{2}$ mm.

In general facies this species resembles a hirtose *Valgus*

*Hab.* Natal (Durban).

Burmeister in his description says that the elytra are concolorous. In the two female examples which I have seen the black patches and bands on the elytra are nearly obliterated.

## SUB-FAMILY HOPLINIINÆ.

Body partly or entirely clothed with scales, squamose hairs, seldom with simple hairs; labrum sub-horizontal or vertical, ligula bi-lobate and projecting freely beyond the mentum (*Pachycnemini*) or fused with the mentum (*Hopliini*), maxillæ dentate or simple, often with a broad membranaceous border; antennæ nine- or ten-jointed, club never very long, tri-jointed, the joints fitting against each other; elytra seldom convex, never covering the pygidium, which is either vertical or strongly sloping in a forward direction; abdomen sometimes very compressed laterally; spiracles similar to those of the MELOLONTHINÆ; hind tibiæ without spurs or with one spur only; claws single or double, unequal except in the genus *Dichelus*, cleft or simple, the smaller one usually pressed against the larger which is articulated as in the Sub-Family RUTELINÆ; hind femora without oblique rows of bristles on the outer face.

This Sub-Family can be divided into two distinct Tribes owing to the shape of the ligula.

Ligula free, membranaceous, bi-lobate .. .. .. .. .. .. PACHYCNEMINI.

Ligula horny, fused with the mentum .. .. .. .. .. .. HOPLIINI.

The last-named Tribe can be also divided into three groups owing to the shape of the labrum and of the abdomen, or of both of them combined.

$A^3$. Labrum not vertical.

$B^3$. Abdomen very compressed laterally in the male.

$C^1$. Anterior tibiæ tri- or quadri-dentate outwardly, the basal teeth set at right angles with the tibia, and the apical tooth not oblique .. .. .. .. .. .. .. *Heterochelides.*

$A^2$. Labrum vertical or not.

$B^2$. Abdomen compressed laterally in the male.

$C^2$. Anterior tibiæ bi- or tri-dentate outwardly, the outer teeth seldom set at right angles, and the apical one always slanting.. .. .. .. .. .. .. .. .. *Scelophysides.*

$A^1$. Labrum vertical or not.

$B^1$. Abdomen not compressed laterally in the male.

$C^1$. Anterior tibiæ with three slanting outer teeth .. .. .. *Hoplides.*

The number of genera and species of HOPLIINÆ occurring in South Africa is the most striking feature of the Coleopterous Fauna of this part of the world.

In the districts of the Cape Colony where the winter rains prevail (May–September) it may almost be said that on a bright day in the spring (August–October) no flower is without a tenant. Although less abundant where the summer rains (November–March) occur, they are, however, numerous and varied.

The insects included in the Tribe PACHYCNEMINI are characterised by very long and slender maxillæ, often without inner teeth, and having a bi-lobate membranaceous ligula. The shape of these mouth-parts implies a suctorial diet. Few insects are better adapted for fertilisation than the species of *Anisonyx*, *Peritrichia*, *Lepitrix*. Covered with dense, long hairs, and provided with a very narrow and elongate clypeus, they penetrate deep into the corolla of the flowers and emerge covered with pollen. The species of *Pachycnema* which, like those of the genera above-mentioned, have no toothed maxillæ and possess a sharply acuminate clypeus, are heavier insects, in many cases scantily clothed with hairs; they also are, however, important agents of fertilisation. *Eriesthis*, *Stenocnema*, and *Korisaba* have strongly dentate maxillæ and a shorter and broader ligula; they are no longer suctorial insects only, and they, like the *Heterochelides* with which they are connected by the shape of the buccal organs, live at the expense of the corolla and pistils.

The species of the group *Heterochelides* are much less hairy, the clypeus is not acuminate, the ligula is fused with the mentum as in all the other genera of the MELOLONTHINÆ, the maxillæ are dentate, sometimes feebly, sometimes strongly; in one instance only (*Nanniscus*) are they simple. They are perhaps more numerous than the PACHYCNEMINI in kind, and certainly so in species and genera. The female retains somewhat the general appearance of the MELOLONTHINÆ, but the male has a facies of his own, owing to the greatly compressed abdomen; the pygidium is strongly declivous in a forward direction, and the hind legs are absurdly large. These features are not, however, restricted to this group, they are also common to the species of the genus *Monochelus*, &c., of the group *Scelophysides*. Among the PACHYCNEMINI they have reached their highest point in the genera *Pachycnema* and *Hoplocnemis* in which the hind tibiæ especially are enormously developed, and the joints of the hind tarsi are sometimes partially, or even entirely fused. This great development of the hind legs is not intended for securing a better hold of the female. There is nothing more ridiculous than to see half a dozen males with their

long hind legs emerging from the pistils of a composite flower where they are mobbing a female which is almost entirely buried head foremost in the pistils, the sub-horizontal pygidium alone being exposed to view. But it is when disentangling themselves that the use of the long hind legs becomes apparent; by means of his long, hinged claw the male hooks himself out of the corolla. It is not only amongst the flower-frequenting kinds that this extraordinary development of the hind legs with their curiously serrate, dentate, and mucronate tibiæ is met with, because the species of *Hoplocnemis*, in which this development has become almost a monstrosity, do not feed on flowers, or at least have not been observed doing so. Their habits seem to be more those of certain DYNASTINÆ, and I suspect them to live, while in the larval state, in the excrement deposits of the subterranean white ant, *Hodotermes viator*, Latr.

In the *Scelophysides* this great development of the hind limbs is less common. Certain kinds of *Monochelus* seem to be met with on grasses. The males of one of the largest kind, *M. spinipes*, are found in the western part of the Cape Colony flying in fields of young oats or corn, and they seldom settle on flowers; the females are seldom seen. Mr. H. Fry informs me that he captured the not less large species *M. natalensis* on oat-sheaves carted from the field in the Umvoti County in Natal. Most of the species of this group are, however, flower-loving insects, except perhaps *Idutyna collaris* and its close ally, *Platychelus hoplioides*, which I never found but on the ground. All the species of *Platychelus* are very hairy, and although living undoubtedly at the expense of the flower they are certainly excellent instruments for its fertilisation. In one genus (*Outeniqua*) the male of the only species known has the hind legs as much swollen as a *Pachycnema*.

The true *Hoplides* are less numerous in kind and in number. They are more closely allied to the Madagascar representatives of the group than to the palæarctic ones, for instance, and while some are diurnal in their habits, others are probably crepuscular or come out in the open when the sky is overcast (*Blikana*, *Harpina*, *Congella*); *Microplus* and *Rabula* are known to be crepuscular.

The distribution of the HOPLIINÆ in South Africa is very interesting. Being entirely dependent on flowers for their subsistence, they appear suddenly after the rains have set in, and disappear as quickly. This is best exemplified in the Cape Colony, where there is a narrow strip of country from long. 24° E. along the south coast, bounded on the north by the Langebergen, and continuing northwards along the west coast, with the Drakenstein, the Olifants River Mountains, the Cedearbergen and Khamiesbergen as

the eastern limit, where the average rainfall in August and September is from 3 to 4 inches. It is in this restricted locality that the number and abundance of HOPLIINÆ are so characteristic. Of the total number of 43 genera and 359 species, 25 genera and 236 species occur in that area. It is especially in that part of the country extending from Clanwilliam to Little Bushmanland, and forming part of the Namaqualand District, that they are found in incredible numbers and ever-varying species if the rains have been plentiful. When I visited that part of the Colony the rains had not been heavy, the fields, nevertheless, were a mass of partly withered marigolds and daisies containing only a few insects, mostly females. I was one month too late. But when, profiting by my experience, Mr. R. M. Lightfoot went over the same ground two months earlier than I did, and after plentiful rains had fallen, the whole country was a vast carpet of huge marigolds tenanted by numberless HOPLIINÆ. So plentiful indeed were they that they had to be scooped by the hand from the flower into the killing bottle. No less than 10 species of *Pachycnema* seem to be restricted to that locality, but *Anisonyx* is not represented there, and the species of this genus seem to be met with especially where the Heaths (*Ericaceæ*) abound. They are more numerous and more varied in the Caledon and Riversdale, but they are plentiful also in the Cape, Stellenbosch, and Ceres, Districts. Two species are found, however, near Graham's Town and Port Elizabeth respectively. These localities seem to be their eastern limit of distribution.

Proceeding eastwards from the 24° long. we find the *Pachycnemini* especially represented by the genus *Eriesthis; Pachycnema* has one representative in the neighbourhood of Graham's Town, but on the whole the suctorial HOPLIINÆ are rare, or never very numerous beyond the area mentioned, but in the last-named locality we find a very singular species of *Hoplocnemis* differing much from the other species of the genus, which generally occur in the so-called "Karroo," where rains are scarce and the vegetation is very scanty. *Heterochelides* are fairly common from the 24° to the 27° East, they, however, grow scarcer as we near Natal, and the most northern species is recorded from Eshowe in Zululand. So far they have not been met with, to my knowledge, in the Eastern or Æthiopian region of South Africa. None are recorded from the Orange River Colony, but in the Transvaal we meet with three species, one of which occurs also in Natal and another, the two congeners of which are found only in the Cape Colony, in the calyx of the so-called "Sugar bush." It is worthy of note that I have received a female of one of these two congeneric species (*Diaplochelus longipes*) from Kanye in

British Bechuanaland. This is the widest range known of any of the South African HOPLIINÆ.

If we follow the 30th parallel and compare the HOPLIINÆ found in the west with those met with in the east we are immediately struck by the absence of *Pachycnemini*, except *Eriesthis*, the paucity of *Heterochelides*, and the great number of *Scelophysides* represented by the species of the genus *Monochelus*. Not that the latter genus is not represented in the west, but the number of the western species is less, and their facies is different. This also holds good in the Transvaal, where, however, the species, with a few exceptions, are the same as those found in Natal, but, I am told, in smaller numbers. One genus with only one species (*Outeniqua festiva*) is the only *Scelophysid* known to occur in Mashunaland. It seems, however, to have a wide range, for it has been found at Lourenço-Marquez, in the Transvaal, and British Bechuanaland.

The species of the group *Hoplides* seem to be much rarer in the western than in the eastern part; out of 12 genera and 29 species 3 genera and 7 species only are restricted to the south-western part of the Cape Colony.

The sexual characters of the male are the only ones which permit of the identification of the species, owing to the extraordinary similarity of the females among themselves in the group *Heterochelides* especially. The shape of the genital armature of the male varies as greatly as in other divisions of the Family. I have not, however, made use of them because the species can be somewhat easily distinguished by other outward characters. As stated before, the affinities of the group *Hoplides* lies with the Madagascar fauna, but the PACHYCNEMINI, *Heterochelides*, and *Scelophysides* are South African. On the West Coast of Africa one species of *Pachycnema* has, however, been described from Angola * as well as one *Dichelus* from Pungo Andongo, and in Eastern Africa one *Eriesthis* and a *Dichelus* from Tabora, and also one *Monochelus* from the Ugueno Mountains.

## TRIBE PACHYCNEMINI.

### *Key to the Genera.*

A$^3$. Hind legs slender, similar in both sexes.

B$^2$. Mentum very long and narrow.

C$^2$. Scutellum moderately rounded at the apex.

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* I have so far seen two species of PACHYCNEMINI from Damaraland. One (*Peritrichia ditissima*) differs in colouring from the other species of the genus. Boheman records also a species of *Heterochilides* (*Dichelus suspectus*) from the same part of South Africa.

$a^2$. Maxillæ serrate.

Clypeus sub-rectangular, maxillæ serrate, elytra parallel .. .. .. .. .. .. .. .. .. .. .. *Chasme.*

$C^1$. Scutellum sharply triangular.

$a^1$. . . . Maxillæ without teeth.

Clypeus very long, attenuate, claws of anterior and intermediate legs double, unequal and cleft, of posterior single and simple; elytra elongate, parallel, not much broader than the prothorax.. *Anisonyx.*

Clypeus very long, acuminate, bi-dentate and reflexed at the tip; claws of anterior and intermediate legs double, unequal, and cleft, of the posterior single or double; elytra broader than the prothorax at the base, and more or less plainly narrowed behind.. .. .. .. .. .. .. .. *Peritrichia.*

$B^1$. Mentum short and broad.

Clypeus broad, horizontal, sub-parallel with the margins raised, emarginate in the centre; anterior and intermediate claws double, unequal, posterior ones single or double .. *Lepitrix.*

Clypeus broad, declivous, rounded in front, hind claws single .. .. .. .. .. .. .. .. .. .. .. .. *Khoïna.*

$A^2$. Hind legs of male slightly more robust than the female's.

$a^1$. Maxillæ with teeth.

Clypeus a little narrowed laterally; elytra not much broader than the prothorax owing to the sloping shoulders; outer teeth of anterior legs equi-distant; scutellum moderately long .. .. .. .. .. .. .. .. .. .. .. .. *Eriesthis.*

Clypeus a little narrowed, sharply tri-dentate, scutellum long, sharp; the two basal teeth of the anterior tibiæ connate and set at right angles .. .. .. .. .. .. .. *Korisaba.*

Clypeus sharply acuminate and incised at the tip; elytra broader than the prothorax at the base and plainly narrowed behind; outer teeth of anterior tibiæ nearly connate and set at right angles with the tibiæ, scutellum very long and narrow .. .. .. .. .. .. .. .. .. *Stenocnema.*

$A^1$. Hind legs of male much more robust than the female's.
Clypeus acuminate, seldom angular laterally at the base, incised at the tip; scutellum very long and very sharp; body of the male very plainly narrowed behind.

$a^1$. Maxillæ not toothed .. .. .. .. .. .. .. .. .. *Pachycnema.*

$a^1$. Maxillæ toothed.. .. .. .. .. .. .. .. .. .. *Pachycnemida.*

Clypeus acuminate and having laterally three tubercles, scutellum long, broad at the base, very sharp at the tip; claws of fore-legs double, the others single and simple; head of male with a tubercle.. .. .. .. .. .. .. .. .. *Hoplocnemis.*

GEN. CHASME, Serv.,
Encyclop. Méthod. 1825, x., p. 378.

Mentum elongato-quadrate, but a little attenuate laterally close to the apex, lobes of ligula somewhat broad, very diverging and ciliate inwardly, last joint of labial palpi a little bent inwardly, sub-cylindrical, and a little longer than the preceding one; upper lobe of maxillæ horny, strongly serrate inwardly and having a thick bunch of long hairs at the apex, apical joint of the maxillary palpi curved inwardly, sub-cylindrical, not very acuminate at tip, and nearly as long as the two preceding joints; clypeus broader than long, sub-parallel laterally with the outer angles slightly rounded; prothorax very slightly attenuate laterally in front and a little ampliate on the sides, base not much arcuate; scutellum ogival, not sharp at apex; elytra parallel, or nearly so, and with a humeral callus but no distinct apical one, plane, covered with contiguous bright-yellow minute scales, and reaching nearly to the apex of the propygidium; pygidium vertical in the male, a little sloping in the female, densely scaly; abdomen scaly; legs similar in both sexes; anterior tibiæ with an inner apical spur and two or one very obliquely produced outer teeth; posterior tibiæ not much thickened; all the claws are double and unequal, the inner one in the anterior legs is longer and more robust than the outer, and both of them are deeply cleft; this arrangement of the claws is reversed in the intermediate and posterior legs, in which the outer claw is the longer and more robust of the two, but while in the intermediate legs both claws are cleft, in the posterior only the smaller and shorter claw, which is nearly as long as the outer, is cleft.

*Key to the Species.*

A². Anterior tibiæ bi-dentate outwardly.

Elytra parallel, entirely clothed with golden yellow scales and short black erect hairs in both sexes .. .. .. .. .. .. .. *decora.*

Elytra parallel, and having on each side three distinct bands of yellow scales and a few short black erect hairs .. .. .. .. *jucunda.*

A¹. Anterior tibiæ uni-dentate outwardly.

Elytra sub-parallel, entirely clothed with yellow scales in the ♂, paler in the ♀, and hardly hairy .. .. .. .. .. .. .. *nobilitata.*

CHASME DECORA, Wiedem.,
Zoolog. Magaz., ii. 1, p. 94.
Cuvier's Régn. Anim. Insect., pl. xliv., fig. 8.

Head and prothorax black, elytra and abdomen testaceous brown; head punctulate, clothed with black villose hairs except

on the clypeus which is as long as the head, broad, parallel laterally, but with the anterior angles rounded, straight and not emarginate at tip and with the margins reflexed, genæ prominent; prothorax clothed with dense villose hairs and covered with somewhat closely set orange-yellow minute scales; scutellum densely squamose; elytra sub-parallel, having two shallow dorsal longitudinal sulci clothed with minute orange scales which cover also the slightly raised costæ, but the humeral angle is often denuded, along the suture and the outer margin there is a series of long, bristle-like hairs, but the whole dorsal part is hairy, the hairs on the two costæ being a little longer, stiffer, and more seriate; propygidium covered with yellow scales and also densely hairy; abdomen clothed with whitish scales, and the pectus with greyish hairs; legs black, clothed with a not very dense, flavescent pubescence; anterior tibiæ sharply bi-dentate outwardly.

Length 7 mm.; width 4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Worcester).

### Chasme jucunda, n. spec.

Narrower than the preceding species; the scales with which it is clothed are paler, the head and prothorax are similarly shaped, but the hairs, instead of being villose, are very short and appressed; the elytra have only a few sub-appressed black, bristle-like hairs, and those along the suture and the outer margins are also shorter; instead of being entirely clothed with the yellow scales, each elytron has one broad sutural and one marginal band, and a median one which stops at some distance from the apex; pygidium densely squamose and somewhat hairy, the scales are yellow, but turn to white on the abdomen; legs black, hind tibiæ clothed sparingly with flavescent hairs; anterior tibiæ sharply bi-dentate outwardly.

Length 7 mm.; width 4 mm.

*Hab.* Cape Colony (Clanwilliam).

I have seen the female only of this species, and the scales of the male may be deeper orange-yellow.

### Chasme nobilitata, Burm.,
### Handb. d. Entom., iv., 1, 1844, p. 37.

Broader, and therefore a little more massive than *C. decora;* it is easily distinguished by the unidentate fore tibiæ; the head and prothorax are similar in shape, and also clothed with villose black hairs and flavescent scales; the elytra are distinctly broader than

the prothorax and more ampliated laterally; they are entirely covered with yellow or flavescent scales according to the sex, and are almost hairless even along the suture and the outer margins; the pygidium is covered with yellow scales, turning to white on the abdomen; and the pectus is clothed with white hairs.

Length $6\frac{1}{2}$–7 mm.; width 4–$4\frac{3}{4}$ mm.

*Hab.* Cape Colony (Port Nolloth).

### Gen. ANISONYX, Latr.,

Gen. Crust. et Ins., ii., p. 119.

Mentum very elongate, sub-parallel, or elongato-ovate for more than half the length, then much narrowed, parallel, rounded at tip, more or less sharply carinate in the middle of the outer face, ligula divided into two parallel long membranaceous narrow lobes, labial palpi inserted in two broad but nearly contiguous cavities divided only by a narrow interval, the basal joint is short, the second is slightly longer, the third is a little longer than these two put together, and is sub-cylindrical and moderately blunt at tip; maxillæ very long and slender, upper lobe narrowly horny outwardly, very long, and fringed inwardly and on the upper side with a very thick, somewhat long fulvous pubescence; maxillary palpi moderately long, apical joint shaped like the labial one, but longer; head carinate laterally, clypeus as long as the head, nearly sub-parallel, deeply emarginate in the centre at tip, and slightly grooved longitudinally in the median part; antennæ ten-jointed, club as long as all the other joints; prothorax attenuate laterally in front and with the base arcuate; scutellum triangular and as broad as long; elytra sub-parallel, not covering the whole of the propygidium, pygidium vertical and somewhat convex in the male, more sharply triangular and sloping in the female; anterior tibiæ with an inner slender spur, tri-dentate outwardly with the apical teeth curved and the basal one much smaller than the intermediate and nearly obsolete; hind legs similar in both sexes, tarsi long, anterior and posterior tarsi with a double unequal claw each branch of which is cleft at the tip, but the inner one is stronger than the outer, posterior claw single and simple.

The insects included in this genus are very hairy and covered on the upper side, abdomen, and legs with glittering scales more or less densely set. They are very abundant at the beginning of the spring, especially on heaths. Their habitat does not seem to extend as far as Namaqualand, where the kindred flower beetles are so numerous and varied, but they are met with in the Karroo as far

as Beaufort West and Carnarvon. Two species only are found in the eastern parts of the Cape Colony.

*Key to the Species.*

Upper side black, no scales on the prothorax; elytra occasionally with two narrow, elongate patches of whitish scales on each side .. *ursus.*

Prothorax with a supra-lateral narrow band of glowing red scales on each side; posterior part of elytra and sides covered with similar scales .. .. .. .. .. .. .. .. .. .. .. .. .. .. .. *ignitus.*

Prothorax with three greenish or greenish blue narrow bands of scales; elytra and pygidium black, clothed with dense but not contiguous scales, abdomen without scales .. .. .. .. .. *longipes.*

Head, prothorax, and elytra covered with contiguous bright green scales, the former with two narrow, longitudinal black median lines elytra black, abdomen, pygidium, and hind femora clothed with greenish golden scales .. .. .. .. .. .. .. .. .. .. *ditus.*

Prothorax with a faint lateral marginal patch of bluish scales; elytra black with the posterior part, the pygidium and abdomen sprinkled over with blue scales; the erect bristles on the elytra white *pauperatus.*

Prothorax without any scale; the elytra alone are sprinkled with blue scales, and the erect bristles are black .. .. .. .. .. .. *elizabethæ.*

Prothorax covered with contiguous emerald-green scales except for a median, moderately broad, longitudinal space; elytra black, sprinkled with patches of closely set scales of the same colour; pygidium and abdomen covered with contiguous scales.. .. .. *smaragdinus.*

Prothorax with three, not well-defined bands of greenish scales; elytra and pygidium sprinkled more or less thickly with greenish blue scales; abdomen and hind femora clothed with a long pubescence .. .. .. .. .. .. .. .. .. .. .. .. .. .. *lepidotus.*

Prothorax without scales; elytra set with a few opaline scales; pygidium and abdomen with a few greenish scales; hind femora clothed with a long black pubescence .. .. .. .. .. .. .. *hilaris.*

Prothorax with three narrow median bands and a small lateral patch of slightly greenish opaline scales; prothorax with a narrow marginal and sutural band of similar scales; pygidium and abdomen clothed with opaline scales .. .. .. .. .. .. .. .. .. *gemmatus.*

Prothorax without scales; elytra chocolate-brown and with a conspicuous outer marginal band of opaline golden scales .. .. *lynx.*

Prothorax black, without scales; elytra pale fulvous, edged with black, and having a few opaline scales on the outer margin; pygidium and abdomen clothed with similar scales .. .. .. *senilis.*

Prothorax black; elytra pale fulvous, narrowly infuscate laterally, but without any scales on the upper or under side .. .. .. .. *nasutus.*

Prothorax black; elytra testaceous red; no scales .. .. .. .. *proletarius.*

ANISONYX URSUS, Fabr.,
Syst. Entom. Append., p. 184.

Black, with the antennæ and anterior and intermediate legs testaceous red; clypeus very narrow and as long as the head, very little acuminate laterally, deeply emarginate at apex, rugose; head three times as broad as the clypeus and clothed with very long and very dense black hairs; prothorax as densely clothed with black hairs as the head, attenuate laterally in front, and having a median, not very distinct longitudinal groove; scutellum sharply ogival, a little longer than broad at the base, hairy; elytra sub-parallel, plane, and having on each side two rounded, not much raised costæ the outer of which is the prolongation of the humeral callus which is very developed and sharp, they are clothed with long, greyish and black hairs somewhat seriate but not as dense as on the head and prothorax, and are bristly along the suture, as often as not there are in the median parts two narrow longitudinal bands of somewhat opaline scales which do not extend as far as the apex; propygidium, pygidium, abdomen, and pectus densely villose and without scales; hind tibiæ clothed with long and dense black hairs; hind tarsi testaceous red; anterior tibiæ with a very indistinct third basal outer tooth.

This species is the harbinger of the spring in the neighbourhood of Cape Town. It is found in incredible quantities on the heaths or any flower in bloom at the time. The larva makes no cocoon. The short bands of opaline scales on the elytra are not a specific or a sexual character, but so far as I know these bands are not present in examples found outside the Cape District.

Length $9\frac{1}{2}$–11 mm.; width 5–$5\frac{1}{4}$ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury, Caledon).

ANISONYX IGNITUS, Casteln.,
Plate XLIV., fig. 2.
Hist. Nat. d. Ins., ii., p. 157.

Black, clothed along the sides of the head and on the prothorax with long, dense black villose hairs, and having on the prothorax two lateral bands of glowing, coppery red, minute scales often coalescing; the elytra, except an elongato-quadrate median patch reaching from the base to past the middle, and the propygidium, pygidium, and abdomen, are clothed with similar scales; the antennæ and legs are black, and the basal outer tooth of the anterior tibiæ is as distinct as in *A. ursus*, but the clypeus, instead of being parallel, is a little ampliated laterally in the middle, somewhat sharply

acuminate from there, and deeply emarginate at tip; the elytra have a dense seriate row of black, somewhat bristly hairs along the suture and the outer margins, and also three dorsal rows of more remote hairs on each side; the hind tibiæ are clothed with very long and very dense black hairs, and there is only one humeral costa on each elytron.

Length 10–10½ mm.; width 5 mm.

*Hab.* Cape Colony (Worcester).

ANISONYX LONGIPES, Linn.,
Syst. Nat., i., 2, p. 555.

*A. crinitus*, Fabr., Mant. Insect., i., p. 24; Blanch., Cuvier's Règne Animal. Atl. Ins., vol. 25 bis, fig. 9.

*A. jucundus*, Blanch., Cat. Coll. Par. Mus. Ent., 1850, p. 58.

Black; head and prothorax clothed with very dense, black, villose hairs, and having on the prothorax fine, narrow, longitudinal bands of small, elongate, emerald green scales; elytra, propygidium, and pygidium clothed with closely set but not contiguous, small, elongated emerald green scales, abdomen without scales; antennæ and legs black; clypeus sub-parallel for two-thirds of the length, then a little rounded and attenuate towards the apex, which is incised at tip; the black villose hairs on the head and prothorax are very long and very dense; the scutellum is sharply triangular, and very little longer than broad at the base; elytra parallel and densely hairy, the hairs black and as long on the dorsal part as along the suture and the margin; under side clothed with long blackish hairs, and occasionally with a narrow band of greenish, not closely set scales along the edge of the abdominal segments; hind legs clothed with long hairs; anterior tibiæ with the basal outer tooth very minute.

The scales, though generally green, are occasionally blue. It is this variety that Blanchard has described under the name of *A. jucundus*.

Length 9½–10 mm.; width 4½–5 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury).

ANISONYX DITUS, n. spec.

This species resembles *A. longipes* very closely, and is also covered with green scales, but these scales have a golden sheen; the elytra are testaceous, and are often so closely clothed with green scales that the background is not visible; the clypeus is very elongate, narrow, and more sharply acuminate than in *A. longipes;* the head is covered with scales; instead of five narrow bands of green scales

on the prothorax, there is a very broad lateral band, divided obliquely at the base by a narrow black band, and a median narrow one; the scales on the elytra are almost contiguous, and the pygidium, the abdomen, the hind femora, and the sides of the metasternum are entirely covered with golden green scales; the anterior legs have no basal outer tooth; the hind tibiæ are densely hairy, but the hairs are slightly light fulvous in the inner part.

Length 8–9½ mm.; width 4–4½ mm.

*Hab.* Cape Colony (Ceres).

ANISONYX PAUPERATUS, n. spec.

Black; head and prothorax clothed with dense, long, villose black hairs; the prothorax is sprinkled over with a few greenish blue scales; the elytra are clothed with long, greyish black hairs intermingled with a few white, bristly ones, and have here and there scattered bluish scales which, however, are denser along the outer margin, and also in the depression between the suture and the humeral costa; the propygidium, the pygidium, and the abdomen are clothed with similar scales which are not, however, quite contiguous on the pygidium, which is clothed with black and white long hairs; the species is allied to *A. ursus,* but it is smaller, the clypeus is narrower, but equally long and also incised at tip; the villosity is similar, and the anterior tibia are more distinctly tridentate.

Length 8–9½ mm.; width 4–4¾ mm.

*Hab.* Cape Colony (Carnarvon, Beaufort West, Willowmore, Graham's Town.)

ANISONYX ELIZABETHÆ, n. spec.,

Resembles much *A. pauperatus,* but the whole body is clothed with black hairs, and the elytra alone are sprinkled with blue scales; in shape it is slightly shorter than *A. pauperatus.*

Length 7½ mm.; width 4 mm.

*Hab.* Cape Colony (Port Elizabeth).

ANISONYX SMARAGDINUS, n. spec.

Black, tarsi piceous; head and prothorax covered with long, villose black hairs interspersed on the prothorax with a few longer, white, bristly ones; the sides of the prothorax are clothed with densely set gem-like, shining, emerald green scales leaving only a somewhat narrow median band of the background uncovered; elytra covered laterally with similar not quite contiguous scales which are thickly

set also on the median and posterior part of the space between the suture and the humeral costa; propygidium, pygidium, and abdomen thickly clothed with similar scales; anterior tibiæ piceous red and with the basal outer tooth distinct; clypeus very long, narrow, deeply incised at tip.

This species is remarkable by the brilliancy of the green scales, which, however, have no golden sheen.

Length 9–10 mm.; width $4\frac{1}{2}$–5 mm.

*Hab.* Cape Colony (Riversdale).

ANISONYX LEPIDOTUS, Wiedem.,
Germ. Magaz., iv., p. 139.

Black, or as often as not with the elytra fulvous; head and prothorax very densely villose with the hairs black or fulvous; the prothorax has three median lines of green scales, and on each side an elongate, broad band or patch; the elytra, which are densely clothed at the base with long hairs, fuscous or fulvous, according to the colour of the elytra, have a few scattered green scales, which are also remote on the propygidium and pygidium; the abdomen is without scales, but it is, like the pectus and the hind tibiæ, clothed with very long and dense fulvous hairs; clypeus very long, somewhat slender, acuminate laterally towards the apex, and triangularly emarginate at tip; anterior tibiæ with a somewhat distinct third, basal tooth.

Length $8\frac{1}{2}$–9 mm.; width 4–$4\frac{1}{2}$ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Malmesbury).

Found in great numbers on the flowers of gladiolus and the corolla of *Richardia æthiopica*.

ANISONYX HILARIS, n. spec.

Head and prothorax black, elytra and legs light brick-red, antennæ and palpi black; head and prothorax densely villose, the hairs black; the prothorax has two broad bands of bluish opaline scales on each side, and a narrow, median one; the two lateral bands often coalesce, but the scales are very often rubbed off; the scutellum has no scales, but on the elytra there are some sapphyrine ones somewhat scattered, but denser in the juxta-sutural and the supra-marginal longitudinal depressions on each side; propygidium and pygidium clothed with more or less closely set sapphyrine ovate scales and villose, the hairs greyish; abdominal segments sprinkled with a few sapphyrine scales; pectus clothed with a black villosity; clypeus very long, attenuated laterally from about the median part, slightly

incised at tip, and with the outer angles slightly reflexed; anterior tibiæ tri-dentate, basal tooth very small, yet distinct; posterior tibiæ villose inwardly, the villosity black.

Length 9–10 mm.; width $4\frac{1}{2}$–$5\frac{3}{4}$ mm.

*Hab.* Cape Colony (Riversdale, Worcester).

The examples from Riversdale are smaller than those from Worcester, and the intermediate and posterior tibiæ are black; but in some of the examples from Worcester the basal part of all the tibiæ is black or darkly infuscate.

ANISONYX GEMMEUS, n. spec.

Black, with the elytra pale testaceous; shape and vestiture of the preceding species, but the prothorax is less densely villose, and the black hairs are mixed in the dorsal part with white ones; the five bands, instead of being sapphyrine, are opaline with a golden sheen; the scutellum has no scales; the elytra, in addition to the fuscous-black decumbent hairs, bear a few seriate, erect, white ones longer but as numerous as the black erect ones, and there is along the suture a narrow band of golden, opaline scales, a very much broader one along the outer margin, and a few scales along the base; the propygidium and pygidium are clothed with long, villose, black and white hairs, and are set with numerous scales which are also somewhat abundant on the abdomen; pectus clothed with greyish hairs; anterior and intermediate tibiæ rufescent, the anterior ones with a very short basal tooth; clypeus not slender, incised at tip.

Length 9–10 mm.; width 5 mm.

*Hab.* Cape Colony (Caledon).

ANISONYX LYNX, Fabr.,
Gen. Insect. Mant., p. 210.
Oliv., Entom., i., 5, p. 58, pl. ix., fig. 101.

Black, with the elytra dark chocolate colour; the head and prothorax are clothed with very dense and very long black villose hairs; the clypeus is slender and not much narrowed laterally towards the tip; there are no scales on the prothorax, pygidium, or abdomen, but on the elytra there is a well-defined outer marginal band of opaline golden scales which do not extend round the apex; the pygidium, abdomen, pectus, and hind legs are clothed with black or greyish black villose hairs.

Length 9–$9\frac{1}{4}$ mm.; width 4–$4\frac{3}{4}$ mm.

*Hab.* This species has, so far as I know, been found only on the slopes of Table Mountain.

ANISONYX SENILIS, Burm.,

Handb. d. Entom., iv., 1, p. 43.

Black, with the elytra light fulvous, and distinctly edged laterally with black; the sides of the head are clothed with black hairs, but the villose hairs on the head and the prothorax are whitish; there are no scales on the head, prothorax or scutellum, but the elytra which are somewhat densely clothed with greyish hairs, and have a sutural series of not closely set black bristles, have a border of not very closely set sub-opaline golden scales along the margin, and also a strip of them along the suture which is very narrowly infuscate; propygidium and pygidium densely scaly; abdomen and hind femora densely scaly, and clothed, like the pectus, with greyish hairs; clypeus very elongated and narrow; legs black; basal outer tooth of anterior tibiæ very small.

This species is evidently allied to *A. gemmeus*, but the elytra are more depressed, and the clypeus is more slender in the basal part and more parallel. I know only the male.

Length 9½ mm.; width 5 mm.

*Hab.* Cape Colony (no exact locality).

ANISONYX NASUUS, Wiedem.,

Germ. Magaz., iv., p. 140.

Guér., Ménev., Icon. Règn. Anim. Ins., pl. xxv. bis, fig. 9.

Similar in shape and colour to the preceding species; the elytra are very light fulvous with the outer margins more or less distinctly infuscate laterally, but there are no scales either on the prothorax, elytra, pygidium, or abdomen, and the villose hairs covering the head and prothorax, elytra, pygidium, and abdomen are black; legs black; the clypeus is a little ampliated laterally near the base.

Length 8–8¼ mm.; width 4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch).

ANISONYX PROLETARIUS, n. spec.

Similar in shape, although a little more robust, to *A. nasuus;* it is also scaleless, but the elytra are brick-red and not infuscate laterally, the villosity on the head and prothorax is denser and darker, and the hairs on the elytra are more erect.

Length 8–9 mm.; width 4–4½ mm.

*Hab.* Cape Colony (Riversdale, Caledon, Swellendam).

(*I have not been able to identify the following species.*)

ANISONYX FASCIATUS, Burm.

Handb. d. Entom. iv. 1, p. 44.

"Black, hairy; elytra reddish at base and having two posterior bands which, like the margins of the prothorax, consist of white scales.

Length $3\frac{3}{4}$ lin. Male.

"Somewhat shorter than *A.* (*Pachycnema*) *abdominalis*, narrower behind, and with the legs long and thick. Head black, clypeus moderately long, both punctate and clothed with a black pubescence; antennal club not elongate; prothorax quadrate, covered with a scattered punctuation and some black pubescence, lateral margin set with white scales, the angles of this margin extending inwardly; scutellum black, with whitish scales; elytra red at the base, black from there, and having at some distance from the base two transverse bands of white scales, and some similar spots disposed in a transverse row in the basal part, while in the apex there is a single, similar marginal spot; penultimate abdominal segment clothed with white scales, everything else pure black and hairy, only the median tibiæ somewhat scaly; anterior tibiæ tri-dentate, the basal tooth very small; hind tibiæ tolerably thick, sharply edged above and below."

Burmeister gives the habitat of this species as "South-Eastern Africa." This is doubtless a mistake, because all the other species to which he affixes this habitat are from the western part of the Cape Colony.

GEN. PERITRICHIA, Burm.,

Handb. d. Entom., iv., 1, 1844, p. 46.

*Pherocoma*, Blanch., Cat. Coll. Mus. Par. 1, p. 59, 1850.

Mentum of *Anisonyx*, but more gradually attenuate laterally, lobes of ligula a little broader, apical joint of the labial and maxillary palpi a little ampliated outwardly, but straight inwardly, and as long as the two preceding joints together; maxillæ with the upper lobe horny, very small or elongate and having at tip a long pencil of hairs; clypeus elongate, more or less sharply acuminate, often reflexed at tip; prothorax narrower than the elytra, densely pilose; elytra sub-parallel, or gradually attenuate laterally from the humeral angle towards the apex, not entirely covering the propygidium; pygidium obtusely triangular; abdomen completely or partly covered with scales or squamose hairs; anterior tibiæ sharply tri-dentate, apical tooth longer than the second, and likewise curved outwardly, basal tooth smaller than either of the other two, but sharp and

straight, and having an inner spur; anterior claws double; the inner one is not deeply cleft at about the median part, and the outer is more slender, half the length of the inner, and cleft at the tip; the outer claw of the intermediate legs is similar to the inner one of the anterior legs, and the inner is slender and bifid at tip, in the hind legs the outer claw is very robust and single (*Peritrichia*), or there is a thin and simple inner one half the length of the outer and set against it (*Pherocoma*).

The facies of the insects included in this genus varies a little. *Peritrichia tristis* resembles *Anisonyx*, while the facies of *P. capicola* approximates to that of *Lepitrix*. The species of *Pherocoma* are more parallel than the true *Peritrichia*, the clypeus is less elongate and less narrowed, and in the hind tarsi the inner claw is simple and there is a small outer one pressed against the inner, while in *Peritrichia* this claw is simple and single; there are, however, numerous variations between these two forms; for instance, *P. hirtipes* is a *Pherocoma* because of the double claw of the hind tarsi, and a true *Peritrichia* because of the acuminate clypeus and of the elytra being attenuate behind.

### *Key to the Species.*

A². Claw of hind tarsi double, the inner one strong and simple, the outer one thin, pressed against the inner, and only half its length .. .. .. .. .. .. .. .. .. .. .. .. (Pherocoma.)

B². Elytra sub-parallel.

Black, elytra light testaceous or ferruginous and without scales; the two basal abdominal segments only clothed with white scales .. .. .. .. .. .. .. .. .. *tristis.*

Prothorax with an all-round margin of flavous scales and two median patches of the same on the disk; elytra testaceous-brown, and having round the apical part a narrow band of opaline scales ascending the suture; pygidium and abdomen clothed with greenish scales .. *grata.*

Black; abdominal segments edged with scales, but the two basal ones entirely scaly in the male, female black with the elytra darkly ferruginous or somewhat piceous red, and having irregular, elongate patches of flavescent scales *abdominalis.*

Prothorax faintly marginate with scales, and having on the disk four little patches of scales; elytra with three transversely set white scaly spots near the base, and an apical marginal band .. .. .. .. .. .. .. .. *guttata.* / *saga.*

Prothorax with two median round black patches; elytra reddish brown and having on each side seven black, round spots *nigro-maculata.*

B¹. Elytra attenuate laterally from the shoulder to the apex.

Prothorax with a margin of round, white scales; elytra with a margin of white scales and with two transverse white bands extending nearly from side to side; clypeus very sharply acuminate and reflexed at the tip.. .. .. *hirtipes.*

Prothorax with a margin of scales and having on the disk two arcuate ones; elytra with two arcuate bands or spots; clypeus not sharply acuminate at the tip, posterior tibiæ not densely villose.. .. .. .. .. .. .. .. .. *ditissima.* / *dita.*

A¹. Claw of hind tarsi single, not cleft .. .. .. .. .. .. (PERITRICHIA).

B². Elytra not much narrowed towards the apex.

C². Body not very hairy.

Black, prothorax, elytra and legs not densely hairy; prothorax with two discoidal scaly patches; elytra with a few flavous patches in the male .. .. .. .. .. .. *plebeia.*

C¹. Body densely hairy especially the sides and hind legs.

Black, elytra fulvous-brown; abdomen clothed with dense whitish hairs; hairs on the sides and hind legs black .. .. .. .. .. .. .. .. .. .. .. .. *ursus.*

Male black and entirely clothed with black hairs, the hairs light-fulvous on the female; upper side not deeply punctate .. .. .. .. .. .. .. .. .. *nigrita.*

Male black and entirely clothed with black hairs; upper side very deeply punctate .. .. .. .. .. *nigrovillosa.*

Black, with the elytra fulvous or chestnut-brown in both sexes, clothed on the upper side with flavous and black hairs, and fulvous hairs beneath .. .. *nitidipennis.*

Black, with the elytra chestnut-brown, and clothed all over with black hairs .. .. .. .. .. .. .. *cognata.*

Black, with the elytra chestnut-brown, and having on each side a ring of whitish scales, body clothed with dense greyish black hairs .. .. .. .. .. .. *tulbaghina.*

B¹. Elytra distinctly attenuate towards the apex.

Black, with the elytra fulvous or light brown, broadly infuscate on the outer margins, and having there a faint band of greyish white scales; hairs on the sides and on the upper edge of hind legs white; pygidium scaly.. .. *dimidiata.*

Black, with the elytra brown in the male, or brownish-red in the female; prothorax with two discoidal patches of decumbent hairs; upper side clothed with hairs, black and white in the male, yellowish in the female; pygidium hairy .. .. .. .. .. .. .. .. .. .. *capicola.* / *spuria.*

Black and clothed with black hairs .. .. .. .. .. *pulchella.*

Black, with two white patches on prothorax; elytra light fulvous, narrowly infuscate laterally and behind, outer margins with a narrow band of white scales; pygidium and abdomen scaly.. .. .. .. .. .. .. .. .. *puberula.*

Black, without patches on the prothorax; elytra chestnut-brown, broadly edged along the suture and the outer margins with black; pygidium clothed with black hairs and having in the centre a broad longitudinal band of appressed, white, lanuginose hairs .. .. .. .. .. *pygidialis.*

Male black, with the prothorax edged with white squamose hairs, and having two patches of the same in the centre; elytra, pygidium and under side with dense white scales; female with the elytra reddish brown and scaly along the outer margins and the suture .. .. .. .. .. .. *pistrinaria.*

Black, with the elytra chestnut-red; prothorax edged all round with squamose yellow hairs, and having two patches in the centre; elytra, pygidium, and under side clothed with yellow hairs .. .. .. .. .. .. .. *hybrida.*

PERITRICHIA (PHEROCOMA) TRISTIS, Burm.,
Handb. d. Entom., iv., 1, p. 46.

Black, with the elytra testaceous-red or light testaceous; there is no trace of scales except on the two basal segments of the abdomen, which are clothed with whitish ones; clypeus in the shape of a truncate cone, deeply and almost triangularly emarginate at tip, and with the outer angles sharply reflexed, it is rugose and slightly shorter than the head which is also rugose and clothed, like the prothorax, with long, dense, villose black hairs; prothorax slightly ampliate laterally; scutellum ogival, a little longer than broad, punctulate and hairy; elytra sub-parallel, but not much elongated, being nearly as broad as long, they are not very distinctly sulcate in the dorsal part, but there is a distinct sulcus above the outer margin from below the humeral angle to near the apex, and also a depression under the scutellum, they are covered with decumbent, short, not very dense black hairs, and have seriate, erect, bristly hairs more abundant in the basal part, and nearly as long, but not so densely set as those along the suture; propygidium and pygidium closely punctured, villose; abdomen clothed with greyish hairs, pectus with black ones; legs piceous, anterior tibiæ sub-rufescent, tri-dentate outwardly but with the intermediate and basal teeth set close to one another, and occasionally sub-connate.

Length 8½–9 mm.; width 6 mm.

*Hab.* Cape Colony (Caledon).

PERITRICHIA (PHEROCOMA) GRATA, n. spec.

Female: Black, with two small round patches of greenish opaline scales on the prothorax; elytra chestnut-brown and having a supra-

marginal band of elongate opaline scales denser on the apical part, and ascending the suture for a short distance; pygidium and sides of abdomen clothed with opaline scales having a greenish sheen; abdomen and pectus covered with long, villose, greyish hairs; the head and prothorax are clothed with long, black villose hairs, and the shape of the clypeus is similar to that of *P. abdominalis*, but the elytra are slightly more parallel; legs as in the preceding species.

Male unknown.

Length 9 mm.; width 5 mm.

*Hab.* Cape Colony (Riversdale).

PERITRICHIA (PHEROCOMA) ABDOMINALIS, Blanch.,
Catal. Coll. Entom. Mus. Par., 1850, p. 59.

Black, with the anterior tibiæ and the tarsi reddish; head and prothorax clothed with dense, villose black hairs; elytra black, but occasionally piceous-brown laterally, not scaly in the male, but generally having in the female a narrow basal band of slightly flavescent scales on the prothorax, and on each side of the elytra ill-defined longitudinal bands of similar scales in the two dorsal and the supra-marginal intervals; clypeus a little attenuate obliquely laterally, slightly emarginate in the middle of the apex, with the angles slightly curved; scutellum sharply ogival, villose; elytra somewhat distinctly bi-costate on each side, and having three distinct intervals on each side, they are closely punctate and clothed with black hairs which are dense in the basal part but shorter, less dense and somewhat seriate in the posterior, while those along the suture are more closely set and more bristly; pygidium villose, the hairs are black and not squamose, but the female is entirely clothed with squamiform greyish ones, shorter than, but resembling those with which the abdomen is clothed; in the male the two basal segments are covered with thick greyish-white scales; posterior tibiæ not very densely villose; claws of hind legs double.

I have not seen a single female example that has not some traces of the scaly bands left on the elytra.

Length $9\frac{1}{2}$–10 mm.; width $5\frac{3}{4}$–6 mm.

*Hab.* Cape Colony (Stellenbosch, Malmesbury, Paarl, Tulbagh).

PERITRICHIA (PHEROCOMA) SAGA, n. spec.

Black, with the elytra light chestnut-brown, turning sometimes to piceous; prothorax with a narrow band of flavescent scales on the anterior and posterior margins, the latter more distinct, but often nearly obliterated in the male, in the centre of the disk are two

small patches of scales often also obliterated in the male, and on the elytra, of which the humeral longitudinal costa is very distinct, there is a sub-basal transverse row of three, and a post-median of two moderately large patches of flavescent scales, and the apical part is edged with a narrow band which occasionally coalesces along the hind part of the suture with the inner of these patches; the clypeus is acuminate, more so in the female than in the male; the hairs on the head and prothorax are long, villose and black, and the shape and vestiture of the elytra are similar to that of *P. abdominalis*, but the whole abdomen of the male is clothed with appressed squamiform hairs; legs as in the preceding species.

Length 7½–10 mm.; width 4½–5½ mm.

*Hab.* Cape Colony (Stellenbosch, Paarl, Wellington, Tulbagh, Worcester).

PERITRICHIA GUTTATA, Burm.,

Handb. d. Entom., iv., 1, p. 45.

This species is closely allied to *P. saga*, but the elytra are a little shorter, and a little broader in proportion; the clypeus is a little more acuminate; the villose hairs on the head and prothorax are similar; the latter part has a very narrow marginal border of scales along the base, and now and then a few scattered about on the discoidal part, but at the anterior angle, and also in the median part of the outer margin there is always a small, but distinct patch; the scales are white in the male, yellow in the female; the basal part of the scutellum is often squamose; the five scaly patches and the apical margin on each elytron are similar; the propygidium, pygidium, and abdomen are entirely covered with scales in both sexes, and the hind femora are distinctly scaly; the elytra are chestnut-brown and infuscate laterally in the male, redder and less infuscate on the sides in the female, and the pectus is clothed with long, villose white hairs; hind claws double.

Length 7½ mm.; width 4½ mm.

*Hab.* Cape Colony (Namaqualand).

PERITRICHIA NIGRO-MACULATA, Burm.,

Handb. d. Entom., iv., 1, p. 45.

Black, with the elytra light chocolate-brown; the head and prothorax are similar in shape and vestiture to those of the preceding species, but in the centre of the discoidal part of the prothorax there are two round, small, velvety black patches, and no scales; scutellum hairy; elytra clothed with the customary decumbent short

black hairs, and having on each side seven small, velvety patches, of these four are disposed longitudinally above the outer margin, the apical not being always very distinct, and three on the dorsal part, the median one being situate closer to the suture than the other two; in one of my examples there is a faint trace of a few slightly flavescent, hair-like scales; propygidium only clothed with yellow scales, abdomen and hind tibiæ with squamose appressed white hairs in both sexes; legs black, hind claws double.

Length 6½–7 mm.; width 4 mm.

*Hab.* Cape Colony (Namaqualand).

### Peritrichia hirtipes, Péring.,

Trans. S. Afric. Phil. Soc., vol. iii., pt. ii., 1885, p. 92.

Black, with the elytra piceous, or sometimes piceous-red; clypeus very sharply acuminate, bi-dentate at tip; head and prothorax clothed with black, villose hairs, the latter has a faint basal margin of squamiform hairs and a few scales, a lateral, median marginal somewhat distinct patch of white scales, and a smaller one in the anterior angle; scutellum slightly scaly; elytra distinctly narrowed towards the apex, somewhat densely covered with erect black hairs, narrowly marginate with white scales which also ascend the posterior part of the suture, and they have two transverse, somewhat arcuate bands of similar scales extending across the dorsal part; the propygidium, pygidium, and abdomen are entirely clothed with white scales, and the pectus with a greyish-white villosity; legs black, posterior tibiæ and tarsi very densely villose, the villosity black; hind claws double.

Length 6 mm.; width 3 mm.

*Hab.* Cape Colony (Namaqualand).

I am not sure, now, that the female of my original description is that of the present species.

### Peritrichia ditissima, n. spec.

Black, with the elytra chestnut-brown or chestnut-red; clypeus moderately acuminate and bi-dentate at tip, the teeth not set close together; head and prothorax very briefly pubescent, the latter in the male has a broad basal band of deep orange-yellow scales, a narrower lateral and apical one of flavescent scales, and in the discoidal part an arcuate one reaching on each side from near the median part of the base to the median part of the outer margin; scutellum densely scaly; elytra a little ampliated in the middle and narrowed from

there towards the apex, clothed with non-contiguous, squamiform sub-flavescent appressed hairs, and having on each side five somewhat broad, saffron-yellow scaly patches, the two lower of which coalesce; the apical part has a band of similar scales which ascend the posterior part of the suture and coalesce sometimes with the inner, lower dorsal patches; in the female the bands of scales on the prothorax are similar but narrower, and white, the patches on the elytra are smaller and have a greater tendency to form two bands; the propygidium, which is very broad, the pygidium and the abdomen are entirely clothed with scales saffron-yellow in the male, white in the female; the hind legs are not scaly and not very villose, and all of them are piceous; hind claws double.

Length 6–7½ mm.; width 4–4¼ mm.

*Hab.* Damaraland.

This species, of which I have seen only three examples, is easily recognised by the arcuate scaly band on each side of the prothorax.

PERITRICHIA DITA, n. spec.

Allied to *P. ditissima*, but smaller; the prothorax has arcuate bands of scales in the discoidal part in the female only, the short hairs covering it and also the scales forming the basal band are white, and on the elytra, which have a border of white scales, are two transverse, non-interrupted bands of whitish scales; pygidium and abdomen scaly-white.

Length 6 mm.; width 3¼–3½ mm.

*Hab.* Cape Colony (Carnarvon), Damaraland.

PERITRICHIA PLEBEIA, n. spec.

Black, with the anterior and intermediate legs rufescent; clypeus moderately acuminate obliquely and with the apical part dentate; head and prothorax clothed with long, but not very dense erect black hairs, the latter part shows no trace of scales along the margins, but there are two small median patches of flavescent scales in the male only; scutellum non-scaly; elytra sub-parallel, not much longer than broad, and with the humeral costa well defined, they are clothed with very short, appressed black hairs, and in the male there are on each side four indistinct maculæ of flavescent scales, and a nearly obliterated narrow, marginal apical band of similar ones; propygidium and pygidium scaleless in the male, but with a slight fringe of them in the female; abdomen without scales except on the two basal segments in the male; anterior tibiæ bi-dentate in the male, tri-dentate in the female; hind claws single, simple.

This species, of which I have seen a small number of examples only, resembles closely *P. abdominalis*, but is easily distinguished by having only one simple claw on the posterior legs. Unlike *P. abdominalis*, it is the male which in this case has scales.

Length $8\frac{1}{2}$–$9\frac{1}{2}$ mm.; width 5–$5\frac{1}{2}$ mm.

*Hab.* Cape Colony (Clanwilliam).

PERITRICHIA URSUS, Oliv.,
Entom., i., 5, p. 58, pl. viii., fig. 88.

Black, with the elytra infuscate, dark brownish red, or chocolate-brown; clypeus very sharply acuminate, incised or bi-dentate at tip; head and prothorax clothed with very long, villose hairs, black but mixed occasionally with a few greyish ones occurring laterally in both sexes, there is no trace of scales; scutellum very long and sharp, villose; elytra attenuate laterally from the shoulders to the apex where they are only half the width of the base, humeral costa distinct, they are clothed with moderately short, villose black hairs which are longer and denser along the suture; scutellum clothed with long, black hairs in the male, greyish in the female; abdomen densely villose in both sexes, the villosity greyish white; pectus, femora and tibiæ, except the anterior ones, very densely villose; legs piceous-red, posterior tibiæ black; there is very little difference between the sexes, but the hind tibiæ of the female are a little less densely villose than those of the male, and the hairs are more greyish.

Length 9–10 mm.; width 6 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Tulbagh, Paarl).

PERITRICHIA NIGRITA, Blanch.,
Catal. Coll. Entom. Mus. Par., p. 60.

*P. cinerea*, Oliv., Ent., i., 5, p. 57, pl. iv., fig. 30.

Black, clothed in the male with black villose hairs and light fulvous ones in the female. Smaller than the preceding species, and with the elytra more attenuated towards the apex, the shape of the clypeus is similar, the villose hairs are as abundant, but they are denser and longer on the elytra which show no trace of scales, and the villose hairs on the abdomen of the male are black; in the female the four abdominal segments have, besides the villose hairs, a covering of squamose appressed greyish hairs; the hind legs are very villose in both sexes.

Length 8 mm.; width 5 mm.

*Hab.* Cape Colony Cape Town, Stellenbosch).

PERITRICHIA NIGROVILLOSA, n. spec.

Male: A little smaller than *P. nigrita*, Blanch., but clothed with equally long and equally dense upright black hairs on the upper side; the clypeus is also greatly elongate and acuminate, but instead of curving upwards from a short distance from the median parts, it is reflexed at the apex only; the hind femora are not so densely villose, and the main distinctive character is the much deeper, broader, and altogether more conspicuous punctuation on the head, prothorax, and elytra.

Female unknown.

Length 6 mm.; width 4½ mm.

*Hab.* Cape Colony (Willowmore).

PERITRICHIA NITIDIPENNIS, Blanch.,
Catal. Coll. Entom. Mus. Par., 1850, p. 60.

Black, with the elytra reddish brown or flavescent; clypeus sharply acuminate and bi-dentate at tip; head and prothorax clothed with very long villose flavous or yellow hairs mixed with occasional black ones, but with the latter less numerous; scutellum long, sharp, villose; elytra a little ampliate laterally, and attenuate towards the apex, but somewhat short, covered with very long villose yellow or flavescent hairs, mixed also with a fewer dark ones, they have no vestige of scales; the pygidial part, the abdomen, and pectus are clothed with very long hairs similar in colour to those on the upper side; hind tibiæ very villose; claws of posterior legs single and simple.

Length 7½–8¼ mm.; width 5 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl).

PERITRICHIA COGNATA, n. spec.

This species is very similar in shape and vestiture to the preceding, but the elytra are darker brown, and the villose hairs are shorter and entirely black on the upper sides, and also on the sides of the abdomen and on the legs, but in the central part of the abdomen they are slightly greyish in both sexes; claws of posterior legs single and simple.

Length 8 mm.; width 5 mm.

*Hab.* Cape Colony (Caledon).

PERITRICHIA TULBAGHINA, n. spec.

Facies of preceding species; it is also black with the elytra brownish red and occasionally infuscate along the apical margin;

clypeus sharply acuminate but not incised at tip; head and prothorax clothed with whitish flavescent, very dense villose hairs mixed with an equal quantity of black ones; no scales on the prothorax; scutellum hairy; elytra a little ampliate laterally towards the middle, attenuate from there to the apex, and very deeply pitted; they are clothed with moderately dense, decumbent greyish hairs mixed with a few erect black ones near the base, and each has a narrow marginal band of white scales ascending the posterior part of the suture, and connected there with an arcuate narrow band of similar ones enclosing the posterior part above the apical callus; pygidial part, abdomen and pectus clothed with very long, greyish villose hairs, and without scales; posterior femora somewhat swollen, not very villose; claws of posterior legs single and simple.

Length 8–8½ mm.; width 5 mm.

*Hab.* Cape Colony (Tulbagh, Riversdale).

### Peritrichia dimidiata, n. spec.

Black, with the elytra slightly testaceous and very broadly infuscate laterally in both sexes; clypeus very sharply acuminate, and with the apical part strongly reflexed and emarginate at tip; the head and prothorax are clothed with very long, greyish and black villose hairs, quite white, however, along the margin of the prothorax, and without any trace of scales; the elytra, which are obliquely attenuate from the shoulder to the apex, are clothed with hairs as long and as villose as on the prothorax but with the greyish-white ones more numerous, and they have a marginal band of small white scales, which cannot be said to be dense, along the outer margin, and forming a more distinct band along the apical part, and sometimes ascending along the posterior part of the suture; pygidium clothed with long black hairs and appressed squamose ones in the male, the abdomen and pectus of which has a long whitish villosity, but with sub-flavescent or ashy-grey ones and also some appressed flavescent hairs in the female; in the male the hind legs are very densely villose, the hairs are black, but on the upper side of the femora there is a very distinct bunch of white ones; this villosity, however, is concolorous in the female; claws of hind legs single, simple.

Length 6–8½ mm.; width 3½–4¾ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Worcester).

### Peritrichia pulchella, n. spec.

This species, of which I have seen only a few examples, resembles *P. dimidiata;* and in general facies *P. capicola;* but there is no

trace of discoidal hairy spots on the prothorax; the elytra are quite black, the greyish villosity is darker in the male, and they have a faint outer marginal band of elongate scales, less dense or less conspicuous than in *P. dimidiata;* the pygidium is hairy and scaly only in the female; the villose hairs beneath, laterally, and on the hind femora have no admixture of fasciculate white ones in the male; and those of the female are sub-flavescent; hind claws single, simple.

Length 7½–8 mm.; width 4½ mm.

*Hab.* Cape Colony (Cape Town).

### Peritrichia capicola, Fabr.,
### Syst. Eleuth., ii., p. 179.

*P. hirta*, Fabr., Syst. Eleuth., ii., p. 134.

*P. pilosa*, Fabr., Syst. Eleuth., ii., p. 134.

*P. proboscidea*, Oliv., Ent., i., 5, p. 59, pl. viii., fig. 96.

*P. distincta*, Blanch., Catal. Coll. Ent. Mus. Par., p. 60.

Black, with the elytra testaceous red, broadly marginate with black outwardly and along the suture in the male, redder and not infuscate in the female; the clypeus is sharply acuminate and reflexed at tip; the villosity, which is long and dense, is greyish in the male and slightly flavescent in the female; along the margins of the prothorax there is a narrow band of short, sub-squamose hairs, and as often as not there are on the disk two minute patches of similar ones; the elytra are obliquely attenuate from the shoulders to the apex, and are clothed with long greyish and black hairs, the former predominating in the male, and flavescent in the female; the pygidial part and the whole of the under side are very densely villose; legs piceous, hind legs villose; claws of hind legs single, simple; there are no scales on the elytra, but in the male especially the white hairs are shorter and denser at the rounded, apical part.

Length 7½–9½ mm.; width 4½–5¼ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Worcester, Uniondale).

### Peritrichia spuria, n. spec.

Intermediate in shape between *P. capicola* and *P. pistrinaria*, it is, however, more closely related to the former, from which it differs by the deeper and much less closely set punctuation of the prothorax, and also by the two longitudinal impressions on each side of elytra which are divided by a more costate interval; the colour is black in the male, with the elytra chestnut-red in the female, and the

pubescence round the head and thorax is white, but black on the dorsal part, and the erect hairs on the elytra are interspersed with appressed white squamose ones as thick as in *P. pistrinaria*, but not quite so closely set; the rest is as in *P. capicola*, and in well-preserved examples the prothorax has also two small discoidal scaly patches, and occasionally some scales along the anterior margin; in some females the pubescence is yellowish instead of being white.

Length 7½–8 mm.; width 4–4⅘ mm.

*Hab.* Cape Colony (Willowmore, Port Elizabeth, Graham's Town, Knysna).

### Peritrichia puberula, n. spec.

Black, with the elytra light fulvous and the suture and the outer margins slightly infuscate; they have a marginal band of not closely set greyish-white scales; the shape of the clypeus, the colour and disposition of the villose hairs covering the upper and outer side in both sexes is similar to those of *P. capicola*, and it has also two discoidal small hairy spots; it is very much smaller, the elytra are more acuminate in proportion to the size, and the pygidial area and the abdomen are distinctly scaly in both sexes.

Length 6 mm.; width 3½ mm.

*Hab.* Cape Colony (neighbourhood of Cape Town).

### Peritrichia pygidialis, n. spec.

Black, with the elytra light testaceous and very broadly infuscate laterally; clypeus sharply acuminate and reflexed; head and prothorax clothed with very long villose hairs, which in the male are white along the apical margin of the prothorax and on the sides, but are mixed with greyish-black ones in the discoidal part, and have also there a transverse median band of white hairs, in the female these hairs are flavescent, there are no scales, nor are there any on the elytra which are strongly attenuate laterally towards the apex, they are clothed with whitish or slightly flavescent hairs, and have on each side at tip a small outer hairy white patch; the propygidium and pygidium are clothed with black hairs, and in the central part there is in both sexes a broad white band consisting of lanuginose sub-squamose appressed ones; the prosternum and mesosternum are clothed with dense, villose, yellow hairs in both sexes, and the metasternum with white ones; the abdominal segments have a fringe of squamose white hairs, but the two apical segments and the upper side of the others have orange-yellow villose hairs in both sexes; claw of hind legs single, simple.

Length 8½–10 mm.; width 5–6 mm.

*Hab.* Cape Colony (Oudtshoorn, Willowmore).

### Peritrichia pistrinaria, Péring.,

Trans. S. Afric. Philos. Soc., vol. iv., pt. ii., 1888, p. 100.

Totally black, but with the elytra of the female fulvous, or occasionally reddish brown; clypeus very sharply acuminate, bifid and reflexed; head clothed with greyish hairs in the male; prothorax clothed with somewhat short hairs which in the discoidal part are partly black and partly grey, but are white, denser, and lanuginose all round the margins, in the central part of the disk are two distinct but small squamulose white patches; scutellum squamose; elytra less attenuated towards the apex than the five preceding species, covered with non-contiguous, elongate white scales intermingled with erect or sub-erect, black, somewhat bristly hairs which are longer and stiffer along the suture; pygidial part and abdomen entirely covered with white appressed squamose hairs; pectus clothed with white villose hairs; legs piceous, the hind ones villose on the upper side; in the female the marginal band on the prothorax is more lanuginose laterally and in front, more squamose along the base, and yellowish instead of white; the elytra have along the outer margins a more or less distinct broad band of whitish scales which also ascends the suture for some distance, and there are a few more scattered on the surface, but not as numerously as in the male; the abdomen is more hairy than scaly, and the legs are rufescent; claws of hind legs simple, single.

Length 8–9½ mm.; width 5–5¼ mm.

*Hab.* Cape Colony (Clanwilliam, Namaqualand).

### Peritrichia hybrida, n. spec.

Black, with the elytra light testaceous; clypeus sharply acuminate, bifid and reflexed; head covered with yellow villose hairs; prothorax edged all round with villose, slightly lanuginose yellow hairs and with black ones mixed with a few yellow ones on the disk in the median part of which are two small, very distinct flavous, squamulose patches; in the female the hairs along the base are more squamose; scutellum clothed with yellow, appressed hairs; elytra attenuate laterally from the humeral part to the apex, and clothed with very long and very dense villose yellow hairs, among which are a few black ones more numerous near the base; propygidium and pygidium densely hairy, the hairs yellow; abdomen also densely

hairy, the hairs yellow on the sides, but whitish in the middle; legs piceous, briefly villose; claws of hind legs simple, single.

Length $6\frac{1}{2}$–7 mm.; width 4–$4\frac{1}{2}$ mm.

*Hab.* Cape Colony (Uitenhage, Graham's Town).

## GEN. LEPITRIX, Serv.,

Encyclop. Méth., 1825, x., p. 381.

Mentum comparatively short and broad, broader than long, lobes of ligula very long and moderately wide, membranaceous, setulose inwardly; apical joint of labial and maxillary palpi longer than the two preceding, sub-fusiform outwardly but somewhat curved inwardly; upper lobe of maxillæ simple, broadly triangular inwardly and fasciculate, but produced at apex into a narrow, elongate, membranaceous process which is densely fasciculate at tip; clypeus as long as the head, nearly parallel or slightly ampliate laterally in the median part, depressed in the centre, more or less deeply emarginate at tip, sharply carinate laterally, and horizontal, or nearly so; prothorax slightly longer than broad, not much attenuated laterally in the anterior part, emarginate in the posterior, base moderately arcuate; scutellum long, or very long, sharply triangular; elytra plane, much broader than the prothorax, distinctly narrowed obliquely from the shoulders to the apex, and covering only the base of the propygidium, which is as wide as the pygidium, the latter is triangular, vertical in the male, sloping in the female; the legs are slender, the tarsi long; the anterior tibiæ are tri-dentate outwardly, the teeth are equidistant, but the basal tooth is very small, and the apical one is slanting outwardly; the claws of the anterior and intermediate legs are double, the inner one is cleft at about the middle, and the outer one is much shorter there and slightly bifid at tip, in the posterior legs the claw is either simple and single, or there are two, the inner one being thin and half the length of the outer.

Many of the insects included in this genus have on the prothorax a marginal band and spots formed by fine, closely set scales, and on the elytra sutural or apical bands of similar scales; the propygidium and the pygidium are scaly, but not the abdomen.

### *Key to the Species.*

A². Claw of hind tarsi simple.

Prothorax with a marginal and two discoidal bands of yellow scales; elytra with a non-interrupted juxta-sutural band of similar scales beginning at the base and continued round the apex .. .. .. .. .. .. .. .. .. .. .. .. .. *lineata.*

Prothorax with a narrow marginal and two discoidal bands of flavescent scales; elytra with a narrow marginal band round the apical part .. .. .. .. .. .. .. .. .. .. .. *modesta.*

Prothorax with a narrow marginal band of appressed yellow hairs, but without discoidal bands; elytra without scaly band.. *namaqua.*

Prothorax with a marginal band of flavescent scales, disk clothed with long black villose hairs; elytra with a sutural band of yellowish scales encircling the posterior part from the median part of the suture to the median part of the outer margin .. .. .. .. .. .. .. .. .. .. .. .. *stigma.*

Prothorax without marginal band of scales and clothed with rufous villose hairs; posterior band of elytra as in the preceding species .. .. .. .. .. .. .. .. .. .. .. *hilaris.*

Prothorax without marginal band of scales; elytra fulvous and with an arcuate sub-longitudinal band of flavescent squamose hairs, and a post-median patch or band.. .. .. .. .. .. *setosa.*

Prothorax without marginal band of scales, and clothed with densely villose greyish-white hairs; elytra light fulvous and with a narrow but distinct marginal and sutural fuscous band.. *pilosa.*

A¹. Claw of hind tarsi double.

Prothorax with a marginal band and two discoidal patches of yellow scales; elytra with a sutural band of yellow scales, beginning at the base, rounding the apex, and ascending a little above the outer margin.. .. .. .. .. .. .. .. *ornatella.*

Prothorax with a marginal band and two discoidal patches of flavescent scales; elytra with a semicircular transverse band extending on both sides, an arcuate longitudinal one on each side of the posterior part along the suture, and two elongate ones along the outer margin .. .. .. .. .. *gentilis.*

Prothorax and elytra without scales, except for a few remote ones at the apex of the latter; pygidium scaly .. .. .. *xanthoptera.*

Prothorax without scales; elytra with a juxta-sutural band of not closely set black scales; pygidium without scales .. .. *dichropus.*

### Lepitrix lineata, Fabric.,

Syst. Entom. Append., p. 830; Oliv., Entom., 1, 6, p. 66, pl. vii., fig. 63.

*L. quadrata*, de Geer., Mém. Ins., vii., p. 645, pl. xlviii., fig. 10.

*L. thoracica*, Thunb., Mém. Acad. Pétersb., 1818, vi., p. 444.

Black, with the elytra light chestnut; prothorax with a broad margin all round of yellow scales and two discoidal lines of similar scales reaching from the base to past the median part; scutellum with yellow scales in the basal part; elytra with a moderately broad, juxta-sutural band of yellow scales reaching from near the

base to the apex, and continued round the apical part; propygidium and pygidium densely scaly; the scales are yellow, but turn to white on the abdomen, which is also clothed with white, villose hairs; the legs and antennæ are rufescent, and the colour of the scales is deeper yellow in the male than in the female; head villose but not on the clypeus which is broad, sub-parallel, but slightly sinuate laterally at base with the outer angles rounded, and very slightly sinuate at apex; the margins are sharply reflexed, the anterior part is somewhat excavate and smooth and the posterior as well as the head is very rugose; prothorax a little obliquely attenuated laterally in the anterior part, then straight, but emarginate from there to the base, rugulose, clothed with long, dense, slightly flavescent villose hairs, and having a faint post-median longitudinal impressed line; scutellum very long and acutely triangular; elytra much broader than the prothorax, and with the shoulders rounded, bluntly triangular and covering the base of the propygidium, plane, not costate, but a little depressed along the suture; pygidium vertical in the male, sloping in the female; anterior tibiæ distinctly tri-dentate outwardly, hind tibiæ similar in both sexes; hind claws single, simple.

Length 9–9¼ mm.; width 5½ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury).

LEPITRIX MODESTA, n. spec.

Shape of *L. lineata* but a little smaller, and with the elytra paler and the legs redder; the prothorax has a narrow band of flavescent scales denser along the anterior and posterior part than on the sides, and is sprinkled on the discoidal part with minute scales forming usually two short longitudinal bands, one on each side of the median part, and there is only a faint trace of some pallid scales round the apical part of each elytron; the sculpture and vestiture of the head are similar to those of *L. lineata* and *L. stigma*, but the clypeus is more deeply emarginate than in *L. stigma;* the elytra are sprinkled with semi-erect black bristly hairs; and the hairs and scales on the pygidial part, abdomen, and pectus are similar.

Length 8–8¼ mm.; width 4½ mm.

*Hab.* Cape Colony (Stellenbosch, Paarl, Tulbagh, Worcester).

LEPITRIX NAMAQUA, n. spec.

Quite similar in shape, size, and sculpture to *L. modesta;* the clypeus is still more deeply incised at apex; the prothorax, instead of scales, has the outer margins clothed with appressed squamose

yellow or yellowish hairs according to the sexes, and there is no trace of scales either on the prothorax, the scutellum, or the elytra, but the pygidial part and the abdomen are clothed with dense yellowish white ones.

Length 8–8½ mm.; width 5 mm.

*Hab.* Cape Colony (Port Nolloth).

### Lepitrix stigma, de Geer,

Mém. Insect., vii., p. 645, pl. lxxxiv., fig. 9.

? *L. fuscipes*, Thunb., Mém. Acad. Petersb., 1818, vi., p. 445.

*L. nigripes*, Fabr., Spec. Ins., i., p. 49; Oliv., Ent., 1, 6, p. 67, pl. ix., fig. 85.

Black, with the elytra a little darker chestnut-brown than in *L. lineata*. The elytra are not quite so elongate and are not therefore quite as triangular, and each elytron is separately rounded at apex; the prothorax has a narrow margin of yellow scales, but no discoidal bands, the scutellum is covered with scales, and on the elytra there is a moderately broad sutural band of flavescent scales beginning past the median part and continuing round the posterior margin; head as in *A. lineata*, but the clypeus is slightly obliquely narrowed laterally from about the median part, the outer angles are not rounded, and it is somewhat deeply emarginate at apex; elytra rugulose and clothed with erect black hairs not very closely set; pygidium, under side and legs as in the preceding species.

Length 8–9 mm.; width 4½–5⅕ mm.

*Hab.* Cape Colony (Cape Town, Caledon, Malmesbury, George, Worcester).

### Lepitrix hilaris, n. spec.

Facies, sculpture and vestiture of *L. stigma*, but the clypeus is more obliquely attenuated laterally from the median part to the outer angle which is distinctly sharp, whereas it is rounded in *L. stigma*, and the emargination of the apical part is therefore more distinct, although not deeper; there is no trace of scales or appressed hairs on the margins of the prothorax, but the villose hairs instead of being black, or fuscous, are fulvous; the elytra are a little redder, but also clothed with black hairs, and the sutural and posterior marginal band of scales are similar, but the scales are more orange-yellow; pygidium and under side similar; the elytra of the female are very distinctly punctured.

Length 9 mm.; width 5 mm.

*Hab.* Cape Colony (Uniondale, Port Elizabeth).

LEPITRIX SETOSA, Burm.,
Handb. d. Entom., iv., 1, p. 41.

Black, with the elytra testaceous-yellow, legs piceous; clypeus a little ampliated laterally and with the outer angles rounded, not acuminate and very slightly emarginate at tip; head and prothorax densely hairy, the hairs greyish or slightly flavescent, but mixed with appressed sub-squamose ones which are a little more squamose along the base; scutellum clothed with squamose hairs; elytra attenuated laterally towards the apex, clothed with short, decumbent black hairs and a few erect ones which are more numerous and longer in the basal part, and having on each side of the scutellum, and reaching to about the median part, an arcuate band of sub-flavescent squamose hairs as well as a transverse, arcuate, ill-defined post-median patch of similar scales, the suture and the outer margins of the elytra are infuscate; basal part of propygidium and pygidium with a band of scales similar to those on the elytra; abdomen and pectus moderately hairy; the pubescence is greyish, but on the abdomen there are some appressed, sub-squamiform hairs.

I do not know the male of this species which Burmeister included in *Anisonyx*, but which, I think, is only a form of transition of *Lepitrix* with *Peritrichia;* claws of hind legs simple, single.

Length $5\frac{1}{2}$–6 mm.; width 3 mm.

*Hab.* Cape Colony (Graham's Town).

LEPITRIX PILOSA, Bohem.,
Insect. Caffr., ii., p. 144.

(*Anisonyx*) *lanata*, Bohem., l. c., p. 145.

Black, with the elytra very pale testaceous edged all round with a fuscous band and having also the suture infuscate; it is clothed with very long greyish or fuscous hairs above and under, and is entirely without scales; clypeus much narrower than the head, quite parallel, but slightly rounded laterally at apex and very little emarginate; the hairs on the elytra are partly recumbent, but in the anterior part they are very villose; the legs are piceous-black, but the anterior tibiæ are rufescent. In the examples in which the hairs on the upper side are whitish grey, the elytra have no marginal or sutural infuscate band.

Length 5–$5\frac{1}{4}$ mm.; width $2\frac{3}{4}$–3 mm.

This pretty little species is as much an *Anisonyx* as a *Lepitrix*, but the shape of the elytra is not sub-parallel as in the former. It somewhat resembles *Pachycnema abdominalis*, but is very much smaller.

*Hab.* Natal (Durban); Transvaal (Klerksdorp).

LEPITRIX ORNATELLA, n. spec.

Black, prothorax distinctly marginate all round with scales and squamose bright yellow hairs, and having two more or less distinct patches of the same colour in the discoidal part; scutellum squamose; elytra with a sutural band of yellow scales beginning at a short distance from the base, rounding the apical part, and ascending above the lateral margin in a band which is distinct for half the length, then obliterated, but there are still near the humeral angle a few scales situated in the same line, the outer margin has a very narrow, partly obliterated band of similar scales; pygidium and propygidium clothed with yellow scales and bristly black hairs; abdomen clothed with light fulvous hairs, but having no scales; the clypeus is slightly attenuate obliquely laterally towards the tip the angles of which are sharp, and it is distinctly emarginate at tip; the hairs on the head and prothorax are black and dense, and the elytra are also clothed with somewhat dense bristly black hairs longer on the suture; legs black, anterior tibiæ and tarsi piceous-red; claw of hind tarsi double, the outer one half the length of the inner.

Length 8–9 mm.; width 5 mm.

*Hab.* Cape Colony (Stellenbosch, Malmesbury, Paarl, Tulbagh).

LEPITRIX GENTILIS, n. spec.

Black, with the elytra brownish red, sometimes slightly infuscate laterally; prothorax marginate all round with flavescent scales, and having in the discoidal part two small patches of similar ones; scutellum not densely scaly; elytra impressed longitudinally on each side of the humeral callus, and having near the base a semicircular band of flavescent scales formed by two coalescing patches on each side and extending from the inner part of one humeral angle to the other, in the posterior part there is a longitudinal crescent-shaped band along the suture and the rounded apical part, and above the outer margin are two elongate patches of similar scales; these patches and bands are sometimes partly obliterated, especially when the impressions on which they are situated are shallow, for they vary in depth, being more shallow in examples from the neighbourhood of the Cape District than further north-west; the pygidium and propygidium are clothed with scales and short, squamulose hairs, and the abdomen with whitish squamose hairs and a greyish pubescence; the clypeus is very deeply emarginate, almost incised, and the prothorax and elytra are clothed with black sub-villose hairs; legs black, anterior tibiæ piceous-red, third basal outer tooth hardly distinct; hind claw double.

In the examples from Worcester the bands and patches of scales are not so well defined in the anterior part as in those from Namaqualand and Clanwilliam, nor are the impressions on the elytra quite so deep, and in the male there are two slightly denuded small patches on each side of the pygidium.

Length $7\frac{1}{2}$–9 mm.; width $4\frac{1}{2}$–$4\frac{3}{4}$ mm.

*Hab.* Cape Colony (Paarl, Worcester, Clanwilliam, Namaqualand).

LEPITRIX XANTHOPTERA, Burm.,

Handb. d. Entmol., iv., 1, p. 39.

Black, with the elytra somewhat brick-red in the male, paler in the female; prothorax with only a few whitish scales along the outer margins; elytra also with only a few scales which are even very often obliterated in the rounded apical part; pygidium and propygidium covered with somewhat flavescent scales; under side clothed with squamulose white hairs and a greyish-white pubescence; pectus densely villose, the hairs white; clypeus deeply incised semicircularly at tip, sub-parallel and with the angles sharp; head and prothorax clothed with long black hairs; elytra sprinkled with somewhat seriate black hairs longer and bristly along the suture; anterior tibiæ tri-dentate outwardly; hind claws double.

Length 7 mm.; width 4 mm.

*Hab.* Cape Colony (Namaqualand).

LEPITRIX DICHROPUS, Blanch.,

Cat. Coll. Entom. Mus. Par., 1850, p. 60.

Black, with the elytra mahogany colour; the head and prothorax are clothed with very dense villose black hairs; the clypeus is slightly attenuated obliquely laterally from a short distance from the apex which is semicircularly emarginate; the scutellum is villose; the elytra are broadly but shallowy sulcate along the suture and have this sulcus filled with black not closely set scales which also form occasionally a narrow band in the posterior part above the outer margin, the suture is bristly and the whole surface bears seriate, black, erect hairs; pygidium and abdomen closely punctured and clothed with black hairs mixed with a few greyish ones; legs black, anterior tibæ sub-rufescent, distinctly tri-dentate; hind claws double.

Length 8–9 mm.; with $4\frac{3}{4}$–5 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch).

## KHOÏNA, n. gen.

Buccal organs of *Lepitrix*, the lobes of the ligula are also long, but broader and spatulate, the anterior tibiæ have no trace of a third basal tooth, but the shape of the clypeus is very different being declivous, rounded in front, and with the margins highly raised all round; the hind tarsi are long, and the joints are clothed with very long feathery hairs in one species, but not in the other, the whole propygidium is left uncovered by the elytra; the anterior tibiæ are bi-dentate, and have an inner spur.

### *Key to the Species.*

| | |
|---|---|
| Black, with the elytra piceous-brown in the discoidal part; prothorax with an anterior and a posterior band of squamulose hairs; elytra with a few scattered white scales, pygidium non-scaly but edged along the base of the propygidium and also along the abdominal segment with white appressed hairs; posterior tarsi simple .. .. | *bi-lateralis.* |
| Black, with the elytra testaceous; anterior and posterior margin of prothorax edged with yellow scales; elytra with a posterior sutural band of similar scales; propygidium and pygidium densely scaly, tarsi with fascicles of very long, black feather-like hairs .. .. .. | *plumipes.* |

### KHOÏNA BI-LATERALIS, Thunb.,

Mém. Acad. Pétersb., 1818, vi., p. 446.

*K. abbreviata*, Guér., Icon. Règn. Anim. Ins., pl. xxv. bis, fig. 7.

Black, with the elytra chestnut-brown, or fuscous, and piceous-red in the central part of the disk; head and prothorax clothed with long villose greyish and flavescent hairs, and shorter appressed fulvescent or whitish hairs along the anterior and posterior margins, in the female these hairs are replaced by scales; scutellum clothed with appressed hairs; elytra very much narrowed laterally from the ampliated humeral part, deeply punctured, clothed with seriate, black and greyish hairs, and having a narrow, marginal band of whitish scales ascending also along the suture to about the median part, as well as a few elongate whitish scales scattered here and there on each side of the suture, and sometimes fairly numerous but not closely set; propygidium and pygidium deeply and closely punctured, clothed with long, villose black, or black and grey hairs, but with the apical margin of the propygidium fringed with appressed white hairs; the abdominal segments have a narrow fringe of similar hairs, and the pectus is clothed with long, dense, greyish or whitish villose ones; the head and clypeus are closely and deeply punctured, the latter is strongly declivous, very sharply and highly marginate

and much rounded laterally; legs piceous or piceous-red, anterior tibiæ bi-dentate, posterior normal.

Length 6–6½ mm.; width 4–4¼ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Worcester, Port Elizabeth).

The examples with fuscous elytra have only been found, to my knowledge, in the Hex River Valley of the Worcester District.

### KHOÏNA PLUMIPES, n. spec.

Black, with the elytra livid brown; prothorax with the anterior and posterior margins having a narrow band of orange-yellow scales, suture of the elytra with a similar band reaching from the median part to the apex, propygidium and pygidium clothed with yellow scales; abdomen with appressed, squamiform white hairs, pectus briefly villose; clypeus bluntly ogival and very declivous, hollowed, smooth in the anterior part; head deeply punctured and villose; prothorax also punctured and clothed with black, villose hairs; scutellum not scaly; elytra very elongated and much attenuated laterally from the humeral part to the apex, deeply punctured and having some seriate black bristly hairs a little longer along the suture; legs piceous, anterior tibiæ with two long outer teeth, posterior tarsi set all round with long brushes of dense black hairs.

Length 8 mm.; width 4 mm.

*Hab.* Cape Colony (Clanwilliam).

I have not seen the female of this interesting species, which is most probably the one alluded to by Lacordaire in his "Genera des Coléoptères," vol. iii., p. 181.

### GEN. ERIESTHIS, Burm.,
### Handb. d. Entom., iv., 1, p. 50.

Mentum long, ampliated laterally from the base which is not broad, suddenly narrowed at some distance from the apex, and straight from there, lobes of ligula broad, very divaricating, and fringed inwardly with hairs, labial palpi somewhat short, apical joint quite cylindrical and longer than the preceding one which is swollen; maxillæ wholly or partly horny, armed inwardly with long claw-like teeth, in which case the upper lobe is short, with only one basal tooth when the lobe is longer, and fasciculate with long hairs, even in one species (*E. pusilla*) there is no tooth at all, last joint of labial palpi slightly fusiform and truncate at tip; clypeus nearly as long as the head, a little strangulate laterally near the base, not narrower

at apex than at the base and reflexed at the tip in the male and the female, but occasionally acuminate and more sharply dentate, and more deeply emarginate at tip in the female (*vulpina*, *vestita*, *fallax*); prothorax rounded laterally, a little attenuated in the anterior part; scutellum triangular, longer than broad; elytra plane, covering only the edge of the propygidium; pygidium vertical in the male, sloping a little in the female; all claws double with the exception of *E. stigmatica*, in which the hind ones are single; the inner claw is robust and cleft at tip and the outer one is slender but nearly as long as the outer and deeply cleft at tip in the anterior legs, while in the intermediate and posterior ones the outer claw is robust, and the inner very slender, both the hind ones are simple; the body is covered with sub-lanuginose and squamose yellow hairs and scales, except *E. vulpina*, and the hind tibiæ of the male are hardly thicker than those of the female; the apical inner spur of the anterior tibia is only found in the species the maxillæ of which are not pluridentate.

In all the species but one, *E. vulpina*, which is a transition form between *Lepitrix* and *Eriesthis*, the anterior part of the prothorax is more or less densely hairy, but there is always a somewhat broad basal margin of yellow scales and squamose hairs.

The variation in the number of teeth in the maxilla, which might in other cases be considered sufficiently important to form generic sections, would in the case of *Eriesthis* be greatly misleading, because, with the exception of *E. vulpina*, all the species are plainly closely allied and have a somewhat similar livery, which makes the identification of the species a rather difficult task.

The genus is South African, with one exception from German East Africa, and is poorly represented in the South-Western and Western part of Cape Colony, Calitzdorp being its most Western habitat, but it has numerous representatives in the Eastern and South-Eastern parts of the Colony, in Natal, and in the Transvaal. I have seen an example alleged to have been collected on the Zambezi River by Dr. Bradshaw, but this habitat requires confirmation.

### *Key to the Species.*

A³. Maxillæ without tooth.

Head, prothorax and elytra clothed with dense, erect, greyish hairs; elytra with interspersed and contiguous, thick, squamose flavous appressed hairs .. .. .. .. .. .. .. .. .. .. .. *pusilla*.

A². Maxillæ with one basal tooth.

Maxillæ with a single basal tooth, body without scales; elytra testaceous; covered with greyish and black hairs .. .. .. .. *vulpina*.

Maxillæ with a very briefly trifid basal tooth, elytra clothed with appressed, sub-squamiform yellow hairs .. .. .. .. .. .. *vestita.*

Maxillæ with a simple, basal tooth ; elytra with a marginal band and two transverse discoidal ones formed by small, yellow scales .. .. .. .. .. .. .. .. .. .. .. .. .. .. *fallax.*

Maxillæ with a trifid basal tooth but having numerous hooked ciliæ above it ; elytra covered with orange-yellow scales and having two transverse rows of brown spots on each side .. .. *stigmatica.*

A¹. Maxillæ pluri-dentate.

Maxillæ with three long, claw-like teeth, the basal one non-bifid ; elytra clothed with short black hairs and having two transverse bands of yellow scales .. .. .. .. .. .. .. .. .. .. *guttata.*

Maxillæ with three short, briefly bifid teeth ; elytra covered with appressed sub-squamose yellow hairs interspersed with black hairs, but forming no design .. .. .. .. .. .. .. .. *dubiosa.*

Maxillæ with three long, claw-like teeth the basal one of which is slightly bifid ; elytra clothed with very dense flavous squamose hairs having on each side two somewhat denuded patches .. .. *hypocrita.*

Maxillæ with slender, long, claw-like teeth ; elytra clothed with very dense orange-yellow ovate scales leaving on each side a sub-basal, a median, and a supra-apical denuded space .. .. .. .. .. *semihirta.*

Maxillæ with four short teeth, the apical and basal ones of which are bifid ; elytra with a supra-marginal band of yellow scales ascending the suture, and two similar arcuate bands bi-interrupted on each side .. .. .. .. .. .. .. .. .. .. .. .. *decora.*

### Eriesthis pusilla, n. spec.

Black, with the head and the prothorax clothed with very dense erect greyish flavescent hairs, and having along the posterior margin a band of short, squamose, more plainly flavescent appressed ones ; scutellum clothed with yellow, not contiguous yellowish scales, elytra testaceous, not costate but with the apical callus well developed, clothed with dense erect greyish hairs, but sprinkled with appressed, yellowish, elongate scales somewhat hair-like but not hiding the testaceous ground colour ; pygidial part clothed with dense sub-lanuginose appressed hairs flavescent in the male, greyish in the female ; head very scabrose, clypeus as broad as long, plainly narrowed laterally towards the apex, and narrower and more sharply acuminate than in the other species of the genus, emarginate in the centre and with the outer angles sharp ; prothorax covered with contiguous cicatricose punctures enclosing a smaller, round, setigerous one ; anterior tibiæ tri-dentate.

This species is intermediate in form between *Eriesthis* and

*Peritrichia.* It has the maxillæ of the latter and the clypeus is also a little more acuminate than in *Eriesthis*, but the cicatricose punctures of the prothorax are those of *Eriesthis*.

Length 5½–6 mm.; width 3½–4 mm.

*Hab.* Orange River Colony (Bothaville).

ERIESTHIS VULPINA, Burm.,
Handb. d. Entom., iv., 1, p. 50.

Black, with the elytra chestnut-brown; clypeus hardly obliquely attenuate, truncate at tip and angular laterally in the male, or very distinctly acuminate, bi-dentate and deeply incised in the female; head and prothorax clothed with long, villose, sub-flavescent, or sometimes greyish hairs which are usually erect, there is no trace of scales, and even along the base the hairs are not squamose; scutellum clothed with hairs; elytra without any trace of scale or squamulose hairs, but clothed with sub-erect black and greyish, or sub-flavescent hairs, the latter being more numerous; pygidium and propygidium clothed with long, dense, fulvous hairs turning to greyish or white on the abdomen and the pectus; legs thick, villose; anterior tibiæ bidentate, but with the basal tooth often nearly obliterated in the female.

Length 6–7½ mm.; width 3¾–4¼ mm.

This species is easily recognised by the absence of scales.

*Hab.* Cape Colony (Seymour); Natal (Umvoti County, Frere).

ERISTHIS VESTITA, Burm.,
Handb. d. Entom, iv., 1, p. 51.

Black, with the elytra light fulvous; clypeus very little acuminate laterally and having the outer angles slightly rounded and a little emarginate at tip in the male, more acuminate, sharply dentate and incised in the middle in the female; head clothed with short, flavescent villose hairs; prothorax covered with flavescent hairs which are somewhat long and villose laterally, but which in the discoidal part are appressed, become somewhat squamiform towards the posterior part, and turn to scales along the base, these hairs and scales are not dense enough to hide the black background; scutellum densely scaly, the scales rich yellow; elytra covered with subsquamiform yellow hairs, appressed and not closely set; the propygidium and pygidium are clothed with squamose, short hairs covering the whole surface, but the abdomen and the legs are villose, and the hairs turn to white on the abdomen; basal outer tooth of

anterior tibiæ very small in the male, more distinct in the female; legs piceous, tarsi piceous-red.

Length 6½–7 mm.; width 4–4¼ mm.

*Hab.* Cape Colony (East London); Natal (Maritzburg, Newcastle); Transvaal (Potchefstroom).

ERIESTHIS FALLAX, Burm.,

Handb. d. Entomol., iv., 1, p. 50.

Black, with the elytra chestnut-brown; clypeus sub-parallel in the male and with the outer angle slightly rounded and the apical part slightly sinuated; it is more acuminate in the female, with the outer angle sharper and recurved and the apical part incised; the head and the sides of the prothorax are clothed with somewhat villose, light flavescent hairs which are not so long and are appressed in the discoidal part, while along the base there is a very narrow band of light yellow scales; scutellum scaly; elytra chestnut-brown, clothed with sub-erect, short, black hairs, and having a supramarginal band of not very dense flavescent scales ascending the posterior part of the suture, and two transverse similar bands extending across the elytra, while along the base there is also a more or less distinct band of scales; propygidium and pygidium clothed with lemon or orange-yellow squamose hairs, which turn to white and are not so squamose on the abdomen.

This species resembles very much *E. guttata*, but it is much smaller, the hairs on the prothorax are not so villose on the disk, and reach the basal scaly part, which they do not in *E. guttata*, and the maxillæ are very different.

Length 6–6½ mm.; width 4 mm.

I have seen some examples in which the scales on the elytra and the villosity on the prothorax are denser and more yellow.

*Hab.* Natal (Durban).

ERIESTHIS STIGMATICA, Billb.,

Schönh. Syn. Insect., i., 3, Append., p. 44.

Black, covered on the head and prothorax with a very dense, short, decumbent pubescence, but having along the base of the latter a somewhat narrow band of golden-yellow scales; scutellum densely scaly; elytra dark brown, distinctly ampliated laterally, clothed with contiguous small yellow scales, and having on each side two round black or brown spots, and past the median part three more set transversely, and coalescing sometimes so as to form a band;

propygidium, pygidium, and upper side of abdominal segments covered with very closely set yellow scales; the pygidium has a median longitudinal whitish band and a round patch of the same colour on each side, and from between the scales spring some short black bristles; abdomen scaly in the male, hairy in the female; anterior tibiæ very strongly tri-dentate outwardly; claws of hind leg single; clypeus slightly attenuate obliquely, more deeply emarginate in the female than in the male, and reflexed at tip; maxillæ with a trifid basal tooth, but having numerous hooked bristles above it.

Length 8–9½ mm.; width 5–6 mm.

*Hab.* Cape Colony (Calitzdorp, Port Elizabeth, Uitenhage Graham's Town, Seymour).

ERIESTHIS GUTTATA, Burm.,
Handb. d. Entom., iv., 1, p. 51.

Black, with the elytra chestnut-brown; head and prothorax clothed with greyish villose hairs, posterior part of the prothorax not villose but having along the margin a band of sub-appressed rich yellow, somewhat squamiform hairs interspersed with a few yellow scales; scutellum covered with similar hairs; elytra somewhat infuscate laterally, clothed with very short, sub-decumbent black hairs, and having two transverse bands of greyish squamiform ones reaching from one side to another, but twice or three times interrupted, thus resembling spots; posterior part of the suture and apical part with a band of similar squamiform hairs; propygidium and pygidium clothed with orange-yellow squamiform hairs; under side clothed with greyish hairs, appressed on the abdomen, villose on the pectus; anterior tibiæ strongly tri-dentate; claws of hind legs double; clypeus not acuminate and hardly sinuate at tip.

Length 7–8½ mm.; width 4½–5 mm.

*Hab.* Natal (Umvoti, Durban); Cape Colony (Pondoland); Southern Rhodesia (Victoria Falls).

ERIESTHIS DUBIOSA, n. spec.

Black, with the elytra reddish; shape of clypeus and also vestiture of the head and prothorax similar to that of the preceding species, but the hairs and scales are not such a bright yellow; the scutellum is squamose, and the elytra are covered with appressed hairs which can hardly be called squamose; anterior tibiæ with a very minute basal outer tooth; maxillæ armed with three short, briefly bifid teeth.

In shape, size, and vestiture this species resembles so much *E. vulpina* that it is difficult to distinguish the two, but in *E. dubiosa*

the clypeus is not narrowed laterally in front, and the maxillæ are pluri-dentate.

Length 6–7 mm.; width $3\frac{3}{4}$–$4\frac{1}{4}$ mm.

*Hab.* ? Natal (exact locality unknown).

ERIESTHIS HYPOCRITA, n. spec.

Black, with the elytra somewhat rufescent, covered on the head and prothorax with pale yellow hairs which are dense, but not long, the posterior part of the prothorax is covered with closely set scales; scutellum squamose; elytra clothed with scales mixed with very short erect hairs of the same flavescent colour as the scales, and mixed with equally short brownish hairs which are more numerous or are better seen on two dorsal, partly denuded patches showing more or less clearly on each side; propygidium and pygidium densely squamose; abdomen clothed with appressed hairs; legs and pectus villose; clypeus as broad as long, a little constricted at the base, slightly ampliated in the middle, and with the apical margin, which is only very slightly sinuate, reflexed and angular on each side; maxillæ with three long, claw-like teeth, the basal one of which is bifid; anterior tibiæ tri-dentate.

In some examples from Rustenburg, in the Transvaal, the scales and hairs on the elytra are paler and the two brownish patches on each side are almost hidden.

Length 7–9 mm.; width 4–5 mm.

*Hab.* Natal (Durban, Newcastle); Transvaal (Potchefstroom, Johannesburg, Rustenburg).

ERIESTHIS SEMIHIRTA, Burm.,

Handb. d. Entom. iv., 1, p. 52.

Black, with the elytra dark chestnut-brown; head and anterior part of prothorax covered with yellow, villose hairs, posterior part of prothorax with dense, squamose orange-yellow ones; scutellum densely squamose; elytra clothed with contiguous orange-yellow, appressed, squamose hairs leaving on the dorsal part on each side three transverse denuded patches; pygidium and upper sides of the abdomen clothed with appressed squamiform hairs bright orange, except on the lower side of abdomen, where they are grey; clypeus emarginate at tip and with the outer angles sharp, but nearly parallel; anterior tibiæ tri-dentate; maxillæ armed with five claw-like teeth; claws of hind legs double.

Length 8 mm.; width $4\frac{1}{2}$ mm.

*Hab.* Cape Colony (Bathurst, Graham's Town, Port Elizabeth, King William's Town, Somerset East).

ERIESTHIS DECORA, n. spec.

Black, with the elytra chestnut-red; head and prothorax clothed with comparatively short villose orange-yellow hairs covering the greatest part of the surface, but along the margin there is a moderately broad band of small yellow scales; scutellum densely scaly; elytra very briefly and closely hairy and having a supra-marginal band of very closely set, small orange scales continued along the apical part and ascending along the suture where it unites with the lower of two transverse bands of similar scales which are bi-interrupted on each side, the basal part is also more or less densely scaly; pro-pygidium and pygidium clothed with yellow squamose hairs which are less squamose and turn to greyish on the abdomen; clypeus a little obliquely attenuate laterally, more deeply emarginate and more distinctly dentate laterally in the female than in the male, being straight and reflexed in the latter; maxillæ armed with four short teeth, the apical and basal of which are bifid; inner claw of hind legs small.

This species can be distinguished from the other allied species by the disposition on the elytra of the scales, which form a distinct marginal band.

Length 8½–9½ mm.; width 5–5¼ mm.

*Hab.* Cape Colony (Burghersdorp); Transvaal (Potchefstroom, Boksburg).

KORISABA, n. gen.

Mentum narrow, elongate, oblong in the posterior part, a little narrowed in the anterior, slightly emarginate at tip, lobes of ligula broad; upper lobe of maxillæ robust, horny, rounded outwardly, oblique inwardly, concave and armed with four strong teeth set opposite each other; inner lobe sharply dentate at the tip, apical joint of labial palpi thick, swollen, pyriform, apical point of maxillary palpi elongate, fusiform; clypeus broader than long at the base, and sub-dentate there laterally, slightly attenuate towards the apex, where it is sharply tri-dentate; prothorax diagonally narrowed laterally from the apex to the median part, straight thence to the base where it is broadly triangular; scutellum moderately narrow, elongate and sharply triangular; elytra much broader than the prothorax owing to the great ampliation of the humeral parts, gradually and strongly narrowed from there towards the apex;

pygidium broad, vertical; anterior tibiæ tri-dentate outwardly with the two basal teeth connate and set at right angles with the tibia, the apical tooth is directed obliquely forward; the claws of the anterior and intermediate legs are double and both cleft, that of the posterior is single and simple; the hind tibiæ of the male are moderately robust but not thicker than the thigh.

KORISABA AMABILIS, n. spec.

Black, densely clothed with long, villose greyish and black hairs on the upper, and with greyish-white ones on the under sides, hind legs villose, hind tarsi also villose and bristly; clypeus attenuate laterally, very sharply tri-dentate at the apex, the three teeth of equal size and reflexed; prothorax deeply and somewhat closely punctured, the punctures not scabrose; scutellum clothed with white hairs; elytra broadly ampliated at the humeral part which is rounded, and gradually narrowed from there to the apex, not costate on the discoidal part, but having a somewhat broad, longitudinal impression along the suture; pygidium broad, moderately slanting forwards, nude and shiny.

Length $5\frac{1}{4}$ mm.; width $3\frac{1}{4}$ mm.

*Hab.* Cape Colony (no exact locality).

The only example of this species which I have seen, is a male which was sent to me by the late C. A. Dohrn, who had received it from Drège.

GEN. STENOCNEMA, Burm.,

Handb. d. Entomol., iv., 1, p. 66.

Mentum moderately ampliated laterally in the median part, a little attenuated but not much constricted towards the apex which is straight, ligula very short, the lobes quite lateral; lobe of maxillæ glabrous, not penicillate at the top, armed inwardly with five very strong teeth and five or six hooked stiff ciliæ; apical joints of labial and maxillary palpi sub-cylindrical; head triangular and with the clypeus deeply emarginated in front and the angles dentiform and reflexed; prothorax obliquely attenuate in the anterior part for one-third of the length, straight from there and with the base arcuate; scutellum very long and narrow; elytra ampliated near the humeral part, attenuated from there towards the apex; propygidium wide, pygidium vertical; anterior legs without apical spur, anterior tibiæ strongly tri-dentate, the three teeth are set at right angles, but the apical one is a little more slender than the other two which are very

broad at the base and slightly connate there; intermediate and posterior tibiæ with a distinct apical spur; hind femora and hind tibiæ somewhat swollen in the male and less so in the female; claws of anterior legs double and both cleft, of the intermediate single and cleft, of the posterior single and simple.

An intermediate form between *Pachycnema* and *Eriesthis*. The shape of the outer teeth of the anterior tibiæ is similar to that of some species of the former, but the hind legs are as in *Eriesthis*.

Only one species is known.

STENOCNEMA PUDIBUNDA, Burm.,
Handb. d. Entomol., iv., 1, p. 67.

Chocolate-brown, with the head and prothorax fuscous; clypeus triangular, deeply emarginate at tip and with the outer angles sharply dentate; the head and the prothorax are very closely punctured and the punctures are filled with slightly flavescent scales, but they are also densely hairy, the hairs are somewhat villose and flavescent in the anterior part of the prothorax, and shorter and black in the posterior where there is also a narrow band of small scales; scutellum scaly; elytra impressed along the raised suture and having a rounded costule as a prolongation of the humeral callus, the juxta-sutural depression is filled with a band of minute yellowish contiguous scales beginning at a short distance from the base and merged in the rounded apical part with a similar supra-marginal band reaching very nearly to the base, there is along the costule another discoidal band which does not reach much beyond the median part, and on each side are three discoidal distinct rows of short, stiff black bristles, the sides are also closely bristly; under side and pygidial part clothed with contiguous flavescent scales; pectus villose, the hairs greyish; legs covered with dense, appressed white squamiform hairs. The female is like the male.

Length 7–8½ mm.; width 4¾–5¼ mm.

*Hab.* Cape Colony (Uitenhage, Graham's Town).

GEN. PACHYCNEMA, Serville,
Encyclop. Méthod., x., 1825, p. 375.
*Physocnema*, Burm.

Mentum very long, oblongo-ovate but attenuated towards the tip which is rounded, ligula long, bi-lobate, lobes very diverging; upper lobe of maxillæ densely penicillate, horny at the base, apical joint of labial palpi sub-cylindrical and slightly bent inwardly, apical joint of

maxillary palpi dilated in the inner side, where it is fusiform, and curving slightly inwards on the outer part; clypeus a little shorter than the head, attenuate laterally towards the tip which is truncate, and with the angles sharp or reflexed; prothorax attenuate laterally in front, base marginate, somewhat arcuate, basal angles sharp; scutellum triangular, moderately long, or long; elytra broader than the prothorax, attenuate from the base towards the posterior part, strongly sinuate laterally, and having a strongly developed callus on the humeral part, somewhat plane and having on each side three or four shallow longitudinal depressions filled occasionally with white or flavescent scales; pygidium triangular, vertical or inclined forwards in the male; anterior tibiæ with a very short inner spur which is, however, obliterated in some species, quadri-dentate or tri-dentate outwardly, the teeth sometimes connate, inner claw of the four anterior tarsi twice as long as the outer, and both of them cleft; posterior femora and tibiæ greatly developed, especially in the male; apex of posterior tibiæ dilated, semicircular outwardly, hollowed and stiffly bristly all round, apical spur of the male strong and often displaced or produced into a spine or tooth; posterior tarsi partly or entirely fused and with the fifth joint always longer than the first four put together, claw simple, very long, equal in length to the apical joint; abdomen very compressed laterally; metasternum very broad; trochanters of posterior legs strongly developed and occasionally spinose.

The genus can be divided into two groups.

In the first, the posterior legs of the male, especially the femora, are very strongly dilated or ampliated, and the joints of the hind tarsi are more or less distinctly fused, sometimes even reduced to a single one (*P. calcaratus*).* The habitat seems to be restricted to the South-Western and Western districts of the Cape Colony, where rains occur periodically in winter.

In the second, the elytra are more depressed, the posterior tibiæ in the male are a little thickened, but not inflated, the joints of the hind tarsi are normal, and the apical joint of the maxillary palpi is cylindrical and curves outwardly from the base to the median part.

Some species of this second group occur in the Eastern Provinces of the Cape Colony.

*Key to the Species.*

A². Posterior tibiæ of males very much ampliated; joints of tarsi short, fused.

B². Anterior tibiæ quadri-dentate outwardly.

* In plate xlii., figures 1 to 22 inclusive are those of the outer face of the hind leg; all the others represent the inner face.

Posterior tibiæ of the male scooped inwardly and having a broad, sub-triangular inner median lamina, apical part produced inwardly and outwardly into a sharp spine the outer of which is very long; elytra with the suture, and on each side four distinct denuded costæ, intervals filled with closely set sub-flavescent scales .. *striata.*

B[1]. Anterior tibiæ tri-dentate outwardly.

C[4]. The three teeth quite apical and strongly connate.

Elytra clothed with dense cinerous scales, but having on each side three small denuded patches.. .. .. *melanospila.*

C[3]. The three teeth long and sharp, nearly equidistant but with the two apical ones slightly carinate at the base.

D[2]. Posterior tibiæ somewhat scooped and dentate inwardly, produced on each side of the apex into a distinct dentate process; clypeus dentate laterally.

Elytra with somewhat closely set whitish scales; costæ and intervals set with short decumbent bristles; fifth joint of hind tarsi with a strong median tooth .. .. .. .. *squamosa.*

Elytra covered with minute, contiguous, ashy-grey scales, and having one sutural and four dorsal rows of widely separated, denuded, setigerous granules; fifth joint of hind tarsi as in the previous species .. .. .. .. .. .. *morbillosa.*

D[1]. Posterior tibiæ broadly dilated inwardly; clypeus not dentate laterally.

C[2]. The two apical teeth connate at base and set at a great distance from the basal one.

D[2]. Hind tibiæ very swollen, dentate inwardly.

Elytra red and with a juxta-sutural and a marginal white band; hind tibiæ very swollen and having an inner spine opposite the long apical spur, joints of tarsi fused without a visible suture, but having a long, recurved tooth at the base and a short one at the middle; pygidium with a longitudinal interrupted black band .. .. .. .. .. .. .. .. .. .. *calcarata.*

Elytra brown and with three distinct white or yellow bands on each side; pygidium without any black band; hind tibiæ of male very swollen and produced inwardly into a sub-apical, strong, dentate process, apical spur obliterated; joints fused and with the sutures nearly obliterated, dentate underneath, fifth joint with a sub-median tooth on the under side *flavolineata.*

Elytra black, sprinkled with elongated, not dense, white scales; posterior tibiæ of the male broadly dilated triangularly on the inner part, armed there with a sharp tooth, and at apex with a similar but shorter one set close to the apical spur .. .. .. .. .. .. .. .. *singularis.*

D¹. Posterior tibiæ of the male broadly dilated, not dentate inwardly; apical tarsal joint tri-dentate beneath.

Elytra ferruginous brown, sprinkled with whitish scales, and having on each side three impressions filled with dark scales .. .. .. *murina.*

C¹. The two apical teeth not connate at base.

Elytra black in the male, red in the female and having on each side two round, scaly small patches along the base, three elongated ones in the first interval, two in the second, and an uninterrupted band in the third; tibiæ black in the male .. .. *obscurepurpurea.*

Elytra red in the male, and having on each side three non-interrupted white bands hardly reaching as far as the apex; tibiæ red in the male.. .. .. *alternans.*

Elytra reddish brown, sprinkled irregularly with somewhat dense whitish scales; tibiæ black in the male .. .. .. .. .. .. .. .. .. .. *pulverulenta.*

A¹. Posterior tibiæ of male not much ampliated, joints of tarsi normal.

B³. Pygidium entirely covered with scales.

Elytra brownish red, each with a small humeral yellow spot; prothorax with a narrow border of orange-yellow scales all round, and four small spots on the disk; pygidium covered with yellow scales .. .. .. *marginella.*

Upper side completely black; elytra with long, black setæ along the suture; pygidium covered with white scales .. .. .. .. .. .. .. .. .. .. .. *moerens.*

Elytra light fulvous or reddish brown, densely hairy, pygidium covered with white or flavescent scales .. .. *tibialis.*

Elytra black in the male, reddish in the female, and having on each side nine plain, round, scaly, white or yellowish spots .. .. .. .. .. .. .. .. .. *rostrata.*

Elytra pale testaceous and having a marginal and a sutural black band, and a narrow line of white scales on the rounded, apical margin .. .. .. .. .. .. *abdominalis.*

B². Pygidium with a basal line or band.

Prothorax with a narrow marginal band of scales and a small patch on each side; elytra red, bristly along the suture and the outer margin; pygidium with a broad, basal transverse velvety black patch .. .. .. .. .. *namaqua.*

Prothorax with the scaly outer border, but not the small patch; elytra pale testaceous, bristly all over; propygidium with a narrow, but distinct transverse, apical black band .. .. .. .. .. .. .. .. .. *saga.*

B¹. Pygidium with a longitudinal denuded median band.

Prothorax with a flavous scaly margin; elytra reddish brown, bristly along the suture and on the sides; propygidium with a narrow, velvety, apical line, pygidium covered with whitish flavescent scales, and having in the centre a distinct, longitudinal black band .. .. .. .. .. .. .. .. .. .. .. *lineola.*

PACHYCNEMA STRIATA, Burm.,
Plate XLII., fig. 8; Plate XLIV., figs. 4, 4*a*.
Handb. d. Entom., iv., 1, p. 57.

Head and prothorax black; elytra reddish-brown and having on each side five broad uninterrupted bands of white scales; legs brownish red; head deeply scrobiculate, hairy laterally, clypeus elongate, slightly attenuate towards the apex, little emarginate at tip, and with the outer angles sharply recurved; prothorax greatly attenuated laterally in the anterior part and not sinuate, the base is arcuate and marginate, and the whole surface is covered with closely set, lanceolate scales interspersed with long, flavescent hairs which are denser on the sides; scutellum a little longer than broad, covered with dense, large, elongate scales; elytra ampliated laterally at a short distance from the shoulder in both sexes, and with the humeral callus very pronounced, somewhat depressed in the centre below the scutellum, and having on each side four slightly raised costæ, smooth and denuded in the male, but bearing a row of remote black bristles, they are punctate and partly clothed with flavous hair-like appressed scales, while the five intervals are covered with small, nearly contiguous scales, white in the male, yellowish in the female; pygidium entirely covered with yellowish-white scales; abdomen and under side densely hairy; anterior tibiæ with four strong outer teeth the two anterior of which are connate at base, but are nearer to the third than the basal one, which is a little less sharp than the other three, but broader and a little shorter; trochanters of posterior legs produced in the male into

a long, sharp spine, femora broad and thick, deeply emarginate beneath; inner part of tibiæ produced inwardly at the tip into a compressed lamina dented at each end and with the apical upper part developed inwardly into a sharp spine reaching as far as the base of the fifth joint of the tarsi the four basal joints of which are distinct, but apparently soldered, the fifth joint is as long as the other four, and has three not very distinct denticulations beneath, the claw is as long as the fifth joint, and is very bluntly dentate underneath; in the female the trochanters are also spinose, but the tibiæ are not much inflated, the apical spur is distinct, whereas in the male it has disappeared altogether; the four joints of the tarsi are elongate, but the fifth is as long as the other four, tri-dentate beneath as in the male, and the claw is as long as the fifth joint, but is not bluntly dentate beneath.

Length 10½–11½ mm.; width 7–8 mm.

*Hab.* Cape Colony (Namaqualand).

PACHYCNEMA MELANOSPILA, Burm.,
Handb. d. Entom., iv., 1, p. 59.

Head and prothorax black and covered with dense fuscous hairs interspersed with moderately dense somewhat flavescent hair-like appressed scales; elytra dark chestnut almost bordering on fuscous-brown, covered with ashy-grey scales, and having on each side one distinct median blackish round spot and another one somewhat indistinct; legs piceous, pygidium covered with yellow scales; clypeus very acuminate, bi-dentate at tip; prothorax very much attenuated laterally in front, not sinuate; scutellum very long and sharp, twice as long as broad, covered with greyish-white scales; elytra ampliated laterally, humeral callus much developed and produced as far as the median part of the disk, there are two elongate depressions on each side of the base, and a smaller and rounded one near the suture at about the middle, this round depression is blackish, while the rest of the surface is covered with lanceolate greyish-white scales not set close to each other, in a line with this median depression there is a smaller one, distinctly punctate, which is also blackish, but is somewhat indistinct; abdomen clothed with yellowish scales and greyish hairs; pectus very hairy, legs strongly bristly, anterior tibiæ with three apical connate outer teeth; posterior femora of male thick, tibiæ simple, much thickened close to the base, sub-parallel, slightly sinuate on each side at the apex, stiffly bristly, and with the apical spur distinct, basal joint of tarsi nearly obliterated, fifth joint longer than the three preceding, tri-denticu-

late beneath, claw a little shorter than the fifth joint, simple beneath.

Length 9 mm. ; width 6 mm.

Female unknown.

*Hab.* Cape Colony (no exact locality).

PACHYCNEMA SQUAMOSA, Burm.,
Plate XLII., fig. 9.
Handb. d. Entom., iv., 1, p. 58.

Head and prothorax black, the latter is clothed with dense black hairs interspersed with white, lanceolate not very dense scales ; elytra reddish brown, clothed with a dense but short black pubescence, and with somewhat closely set, and rather large ovate scales, white in the male, flavescent in the female ; head rugose, clypeus not much attenuated laterally towards the tip where it is strongly bi-dentate ; prothorax rugulose, but having the same shape as the preceding species ; scutellum as broad as long, not scaly, but pilose ; elytra broadly ampliated laterally, humeral callus strongly developed and prolonged longitudinally as far as the median part of the elytra, there are on each side two deep, broad, longitudinal impressions divided by a costate interval near the base ; the propygidium has a transverse band of whitish squamose hairs, but the pygidium has no scales in the male ; in the female, however, it has two patches of yellow scales ; in the male the pygidium slants forwards and the abdominal segments are strongly constricted ; the sides of these abdominal segments are fringed with dense white hairs ; the hind legs are red in both sexes ; the anterior tibiæ have three very sharp outer teeth which are quite straight, the two apical ones are nearly connate at base, and the third is equally long and sharp, but very much broader at the base ; in the male the hind femora are very swollen and the trochanters are not spinose ; the tibiæ are compressed, nearly straight inwardly and swollen and emarginate on the outer face near the apex, the upper angle of the emargination being dentate, in the inner face it is somewhat shallowly scooped and has a distinct median tooth, and the two apices of the tibiæ are produced into a sharp tooth, the one on the upper side is very long and much longer than the upper which is shorter but much broader than the apical spur ; the latter is situated close to it and is very distinct ; the four basal joints of the hind tarsi are equal in length but very short and plainly soldered, the fifth is nearly twice as long as all the four together, and is armed with a broad, sharply triangular tooth beneath, the claw is as long as the apical joint, slightly sinuate,

but simple beneath, and somewhat slender. In the female the hind legs are swollen, but much less so than in the male, and simple, and the body is much more parallel.

Length 9–10 mm.; width 6–7 mm.

*Hab.* Cape Colony (Namaqualand, Clanwilliam).

PACHYCNEMA MORBILLOSA, Burm.,
Plate XLII., fig 10.
Handb. d. Entom., iv., 1, p. 58.

Head and prothorax black, clothed with dense, long black hairs and having white scales along the margin of the base only; elytra red, covered with contiguous, round, white scales, and having on each side one sutural, three discoidal and one supra-marginal rows of remote, scar-like denuded spots, each bearing a stiff, stout bristle; legs red; in the female the elytra are flavescent, covered with yellowish scales; the series of denuded setiferous spots are less conspicuous, and they are disposed on more distinctly costate elevations; pygidium not scaly in either sex, but the propygidium is clothed with white scales and hairs in the female; head rugose, clypeus not much elongate, sub-parallel, emarginate at tip, and with the angles distinctly dentate; prothorax very rugose, and of the normal shape; elytra strongly ampliated latterly and with the humeral callus strongly developed but not much elongated on the discoidal part in the male, more parallel in the female, and having along the margin a series of stiff bristles similar to those on the disk; in the male the pygidium is vertical, and the abdominal segments are much compressed; the anterior tibiæ have three outer teeth exactly like those of *P. squamosa*, and the posterior legs are nearly similar in shape, but have no angular tooth on the outer face, and inwardly the two edges of the scooped part are distinctly dentate, instead of having a tooth in the hollowed inner part. In the female the legs are simple and normal.

Length 8–10 mm.; width 5½–7 mm.

*Hab.* Cape Colony (Namaqualand).

PACHYCNEMA (PHYSOCNEMA) CALCARATA, Burm.,
Plate XLII., fig. 12.
Handb. d. Entom., iv., 1, p. 65.

Head and prothorax black; the latter has an all round border of white scales, somewhat flavescent in the female, and six small scaly white patches on the disk; elytra red in the male, flavescent in the female, and having on each side a juxta-sutural broad white band reaching from the base to two-thirds of the length, and a supra-

marginal, slightly longer but a little narrower one, as well as a third rudimentary and basal, often, however, obliterated; in the female these bands are somewhat flavescent; propygidium clothed with white scales, but having a broadly triangular black apical patch, pygidium clothed laterally and along the base with white scales, the denuded interval broad; legs black, pectus hairy, abdominal segments greatly constricted and covered with white scales; in the female the parts of the propygidium and pygidium, which in the male are black or denuded, are brown, turning to yellow; head very hairy, clypeus short, slightly sinuate laterally and with the two apical teeth very long; prothorax rugose like the head, also densely hairy, very obliquely attenuated latterly in the anterior part, and slightly sinuated past the median part; scutellum very elongate and sharp, but somewhat broad at the base, sparingly scaly and slightly canaliculate longitudinally in the middle; elytra strongly ampliated laterally past the humeral part, and diagonally attenuated from there, the humeral callus is strongly developed, but there is a slight depression only on each side of it; the discoidal part is glabrous, but along the suture and the outer margin there is a series of somewhat closely set, very long and very stiff black bristles; in the female these bristles are finer, denser, shorter and flavescent, and the intervals between the scaly patches are briefly but densely pubescent; anterior tibiæ tri-dentate outwardly, the two apical teeth are sub-connate, and the basal one is situate far from them; in the male the trochanters of the posterior legs are simple, the femora are strong, the tibiæ are enormously swollen and have inwardly a sub-apical short tooth situated close to and connate with the apical spur which is very long and sharp; the four basal joints of the tarsi are fused with the fifth without any trace of a suture, and this unique joint has beneath a strong hamate tooth and a much smaller one following it, the claw is much longer than the joint, and bi-dentate beneath near the base; in the female the hind legs are normal and simple.

Length $8\frac{3}{4}$–$9\frac{1}{2}$ mm.; width $5\frac{1}{4}$–6 mm.

*Hab.* Cape Colony (Namaqualand).

In certain parts of this locality the males are uniformly without the two white bands on the elytra, but a few white scales are always visible near the base.

### Pachycnema (Physocnema) flavolineata, Burm., Plate XLII., fig. 13.

Handb. d. Entom., iv., 1, p. 65.

Head and prothorax black, clothed with long black hairs, narrowly marginate all round with white scales in the male and yellow ones in

the female, and having in the median part of the disk four equidistant patches of appressed scales disposed transversely; elytra livid brown in the male, sub-ochraceous in the female, having on each side a sutural and a supra-marginal band connecting along the apical part, and a discoidal one reaching from the base to past the middle and composed of appressed, lanceolate scales, white in the male, yellow in the female; propygidium and pygidium entirely covered with dense round scales; abdominal segments covered with scales; legs black, scaly; the head is narrowed laterally, sub-acuminate, slightly emarginate at tip and with the two angles of the clypeus not highly dentate; the prothorax is deeply punctate, and is gradually narrowed laterally from the base to the apex and not sinuate, the two median scaly patches are sometimes obliterated, but the angles of the anterior part are more broadly scaly than the centre of the anterior margin; in the male the elytra are more parallel than in the previous species, the humeral callus is strong, but short, and there are on each side three longitudinal very shallow lines which are filled with the appressed scales, they are rugulose and glabrous except for a row of closely set black bristles along the suture and the outer margin; the pygidium is vertical, the abdominal segments are not constricted in the centre; the anterior tibiæ are tridentate outwardly, the two anterior teeth are almost connate at the base, and the basal tooth, which is more robust, is situated at a long distance from the two apical ones; the hind trochanters are simple and the femora thick and swollen; the tibiæ are very swollen, and are produced inwardly at a short distance from the apex into a triangular dentate process scooped beneath, and there is no trace left of the inner spur; the four basal joints are fused into a short one, but the suture is still indicated by a row of scales, and underneath there is a sharp spur; the fifth joint is long, very robust, strongly dentate beneath, and the claw, which is longer than all the joints of the tarsi put together, is sinuate and has a distinct tooth underneath; the female is much smaller than the male, and the hind legs are slender in comparison, and simple.

Length 9–10 mm.; width $5\frac{1}{2}$–7 mm.

*Hab.* Cape Colony (Namaqualand).

### Pachycnema singularis, n. spec.,
### Plate XLII., fig. 14.

Head and prothorax black, elytra dark piceous red, nearly black, prothorax and elytra sprinkled with not closely set, elongate white scales; head rugose, parallel for the greater part of the length, then

distinctly emarginate and angular, and with the apical teeth broad and strongly reflexed; prothorax gradually narrowed from the base to the apex, but more distinctly so in the anterior part; deeply and closely punctate, and densely hairy like the head, the scales form a not very distinct margin all round, but those on the disk are few, and very remote; scutellum moderately elongate, non-scaly; elytra not much ampliated below the humeral part, but distinctly narrowed towards the apex, faintly sulcate longitudinally on each side of the humeral angle which is well developed, and narrowly striate along the suture, broadly, not deeply, and very irregularly punctate, glabrous except for the usual sutural and outer marginal row of bristles, and the white scales with which it is sprinkled although numerous, are not at all closely set; the propygidium is covered with closely set white scales, but the pygidium, which is vertical, is bare; the abdominal segments are not much constricted in the centre and are scaly, and the pectus is very pubescent; the anterior tibiæ are tri-dentate, the two anterior teeth are closely set, but not connate, and the basal one is stronger and set at some distance from the apical ones; the hind trochanters are somewhat dentate, the femora are thick, but not equal in proportion to the size of the tibiæ which are extremely swollen and broadly triangular inwardly, the apex of the triangle having a hamate tooth, and at the tip there is, next to the inner spur which is long and slender, a short but distinct tooth; the four basal joints of the tibiæ are short but broad, soldered, and nearly as wide as the fifth joint which is broad but not swollen, the apical claw has a very sharp triangular tooth beneath, and is distinctly curved.

Female black, with the elytra very dark brown, almost piceous or testaceous red; prothorax without scales except in the anterior angles of the front margin; elytra scaleless but deeply punctured, each puncture having a short, greyish or dark seta; pygidium not scaly as in the male, hind tibiæ not swollen and simple.

Length $8\frac{1}{2}$ mm.; width 5–$5\frac{3}{4}$ mm.

*Hab.* Cape Colony (Caledon).

PACHYCNEMA MURINA, Burm.,

Handb. d. Entom., iv., 1, p. 59.

Head and prothorax black, the latter has a distinct marginal band of white scales and is covered with others arranged somewhat in the shape of a cross and having a scaly patch above and below the transverse arms of the cross on each side; elytra dull red, covered with not very closely set whitish-yellow scales, and having in addition

five patches of dark ones on each side; posterior legs reddish; head very rugose, clothed with greyish hairs, clypeus sub-parallel and with the angles of the apex sharp, but not dentate; prothorax very distinctly oblique laterally in the anterior part, and sub-parallel from there to the base, deeply and closely punctate and having past the median part two slight depressions filled by scales; scutellum sharply triangular, longer than broad and covered with rounder and broader scales; elytra ampliated laterally at about the median part, and having a very strong humeral callus prolonged far towards the median part of the elytra, the space alongside this humeral callus is depressed, and across the suture there are two equi-distant transverse impressions, and a supramarginal one beneath the apical part of the costate prolongation of the humeral callus and in a transverse line with the lower impression situated next to the suture, these three impressions, and also a sulcate one on each side of the humeral callus, are filled with a very short, appressed black tomentum; pygidium and abdomen clothed with yellow scales; anterior tibiæ tri-dentate, the two apical teeth connate at base, the basal one stronger and somewhat remote; posterior femora swollen, simple, hind tibiæ also simple, equally swollen, and a little constricted at apex, inner spur distinct; the four basal joints of anterior tibiæ sub-triangular, very closely set, basal one almost obliterated, fifth joint twice as long as the four basal joints put together, moderately swollen, and tri-dentate beneath, claw shorter than the apical joint, curved and simple.

Female not known with certainty.

The two examples I have at my disposal are one captured by Drège and from which the description is made, and another in which the prothorax is entirely covered with elongate white scales and has two post-median elongate patches on each side of the posterior part formed by more closely set scales. This is probably the normal form, because the second example is fresher than the one from Drège's collection.

*Hab.* Cape Colony (Namaquáland).

PACHYCNEMA ALTERNANS, Burm.,

Handb. d. Entom., iv., 1, p. 61, 1844.

Head and prothorax black, elytra and hind tibiæ reddish in both sexes; prothorax with a marginal band of yellowish white scales, a median longitudinal line and three spots on each side of it; elytra with three longitudinal bands of similar scales; propygidium and pygidium clothed with yellow scales; head very rugose, clothed with black hairs, clypeus very little narrowed towards the apex, long, sub-

parallel, strongly dentate at apex; prothorax distinctly narrowed diagonally in the anterior part, thence sub-parallel for three-fourths of the length, deeply pitted, clothed with slightly flavescent hairs; scutellum long, sharp, longer than broad and set with dense scales; elytra very well developed at the shoulders and gradually attenuated laterally from there to the apex where they are less than half the width of the basal part, they have on each side three somewhat deep longitudinal furrows which reach barely to two-thirds of the length and are filled with the appressed scales; pygidium vertical, abdominal segments not constricted in the centre and covered with yellow scales; pectus clothed with flavescent hairs; anterior tibiæ tri-dentate, the two apical teeth are slightly connate at the base and the basal tooth is as strong as the other two, but is set somewhat far from them; the hind femora are greatly developed and simple, the tibiæ are very swollen but narrower at the apex than at the base, simple, with the apical spur very distinct; the four basal joints of the tarsi are distinct but fused, transverse and angular inwardly, the fifth joint is very massive, curved and uni-dentate near the base, the claw is as long as the fifth joint, and simple; the female is like the male, but less robust, the scales are a deeper yellow, and the legs are red.

Length 9–10½ mm.; width 6½–7½ mm.

*Hab.* Cape Colony—locality unknown.

My examples were collected by Drège.

PACHYCNEMA OBSCUREPURPUREA, De Geer,
Mém. Ins., vii., p. 646, pl. xlviii., fig. 12.

*P. maculata*, Fab., Syst. Entom., i., 2, p. 123.
*P. crassipes*, Fab., Syst. Entom. Append., p. 813.
*P. crassipes*, Oliv., Ent., i., 6, p. 68, pl. vii., fig. 62.
*P. crassipes*, Lacord., Atlas, pl. xxix., fig. 1.

The description of *P. alternans* applies very nearly to this species which is, however, smaller, and is therefore comparatively less robust; the colour, including that of the hind legs, is entirely black in the male, but the elytra and also the hind legs are red in the female, and the basal tooth of the anterior tibiæ is not quite so remote; the scales are white in the male and yellow in the female, the median longitudinal band of the prothorax and the four small spots are similar, but at the base of the elytra there are on each side two small scaly patches; the supra-marginal sulcus alone is filled with an uninterrupted band of scales, white or yellow according to the sex, and the juxta-sutural and discoidal ones are twice or thrice interrupted;

in the male the hind femora and tibiæ are similar, but the fifth joint is tri-dentate underneath.

Length 8½–9 mm. ; 5½–6 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Clanwilliam).

The habitat of this species does not seem to extend much beyond the Cape District, but I have received it also from Clanwilliam.

### Pachycnema pulverulenta, Burm.,
### Handb. d. Entom., iv., 1, p. 60.

This species is very closely allied to the preceding one, being very similar in shape and structure, but the elytra are reddish brown in both sexes, and the hind legs of the male are, as a rule, black, but I have occasionally seen some small males with red legs ; there are no scales on the prothorax, along the outer margin, or on the disk which has a much deeper median furrow than in *P. obscurepurpurea ;* the scutellum is slightly shorter, the sulcate parts of the elytra are almost identical, but the scales which are also white in the male and yellow in the female are not so closely set, and do not form a band, except at the rounded apical part ; under side and legs as in *P. obscurepurpurea.*

Length 8½–9 mm. ; width 5½–6 mm.

*Hab.* Cape Colony (Malmesbury, Cape, Stellenbosch, Worcester, Paarl).

### Pachycnema marginella, Fabric.,
### Syst. Entom., i., 2, p. 178.

Head and prothorax black ; the latter has a margin of yellow scales all round, and on the disk four round scaly spots ; scutellum covered with yellow scales ; elytra brownish red, opaque, and having a small patch of yellow scales under the humeral callus, near the outer margin ; propygidium, abdomen, and pygidium clothed with yellow scales, whitish on the abdomen ; legs black ; clypeus sharply acuminate and with the two apical teeth reflexed ; head and prothorax rugose, clothed with somewhat long and dense flavescent hairs and somewhat distinctly grooved longitudinally in the middle, the latter very obliquely attenuated laterally in the anterior part, and nearly parallel from there ; scutellum very long and sharp, and clothed, except at the base, with dense yellow scales ; elytra a little ampliated laterally past the humeral part, and attenuated from there towards the apex ; humeral callus strongly developed, scarcely sulcate except near the base, but not prolonged into a rounded costa,

posterior callus distinct, the surface is covered with very short black bristles somewhat seriate and longer and stiffer along the suture and the outer margins; the two apical outer teeth of the anterior tibiæ are not connate, and the three are nearly equi-distant; in the male the hind tibiæ are only moderately thickened in comparison with the previously described species, not being thicker than the thighs, they are somewhat strangulate at apex, and simple; basal joints of tarsi triangular, fifth joint as long as the four preceding, and slightly tri-dentate beneath; claw a little shorter than the fifth joint.

Female very much like the male.

Length 9–10½ mm.; width 6–6½ mm.

*Hab.* Cape Colony (Graham's Town, Port Elizabeth).

### Pachycnema moerens, n. spec.

This species greatly resembles *P. marginella*, but differs in the colour which is opaque black in the male with the propygidium, pygidium and abdomen clothed with white scales, and reddish brown on the elytra in the female with the pygidium and abdomen yellow; there is a faint trace of a scaly band in the anterior part of the sides of the prothorax, but no scaly patches or spots on the disk, and in the elytra the bristles of the sutural and marginal rows are much longer; in the female the elytra are more distinctly tri-sulcate longitudinally on each side; hind legs similar in both sexes.

Length 9 mm.; width 6 mm.

*Hab.* Cape Colony (Caledon, Riversdale).

### Pachycnema tibialis, Oliv.,

Entom., i., 5, p. 83, pl. x., fig. 118.

Shape and sculpture of *P. marginella* and *P. moerens* from which it differs in the colour of the elytra, which are lighter brick-red, and occasionally narrowly infuscate along the outer margin, and in the scales on the propygidium and pygidium being whiter in the male, there is no trace of scales on the discoidal part of the prothorax, and they are even as often as not obliterated along the outer margins in both sexes, but the distinctive character consists in the very long and dense villosity covering the prothorax, and the longer but less dense black or flavescent bristly hairs clothing the elytra; in most females there are on the elytra some very fine, appressed yellowish but closely set scales.

Length 8–9 mm.; width 5–6 mm.

*Hab.* Cape Colony (George, Port Elizabeth).

PACHYCNEMA ROSTRATA, Burm.,
Handb. d. Entom., iv., 1, p. 61.

Black in the male, dark brown in the female, prothorax with a scaly outer margin and two patches of scales on each side of the median longitudinal groove; elytra with three transverse rows of four, three, and two scaly patches on each side, these scales are white in the male, yellow in the female; head deeply punctate, clypeus very elongate, sulcate in the middle and with the two apical teeth set close to one another and much reflexed; prothorax slightly attenuated laterally in front, somewhat rounded and emarginate towards the base, distinctly convex, very deeply punctured, somewhat deeply sulcate longitudinally in the posterior part, and clothed with dense, long, erect black hairs, in the male there is only a marginal band of white scales all round and a supra-lateral impression on each side of the disk, probably filled with white scales at an early stage, but in the female the marginal scaly band is broader and the scales bright orange-yellow, the disk is sprinkled with similar scales, not, as a rule, closely set, but forming two irregular patches on each side; scutellum long, sharp and scaly; elytra distinctly ampliated laterally in both sexes, and with the humeral callus almost forming the angle of the shoulder, they are set with series of long, black bristly hairs which are as long on the disk as along the suture, they have on each side a sub-basal transverse row of four round scaly patches, a post-median of three, and an apical one of two, which latter do occasionally coalesce, and as often as not are united along the suture in the female with the juxta-sutural patch of the second row; abdomen and pygidium covered with white or yellow scales according to the sex, and set with long, bristly hairs; pectus very densely pubescent; posterior tibiæ very slender, but slightly more swollen in the male than in the female, the four basal joints of tarsi elongate in both sexes, fifth not quite as long as all the first three taken together, claw simple.

Length 8–9 mm.; width 5–6 mm.

*Hab.* Cape Colony (Riversdale, Worcester).

PACHYCNEMA NAMAQUA, n. spec.

Head and prothorax black, the latter with an ill-defined marginal band of white scales, and with four, somewhat indistinct, and often obliterated small round patches; elytra red, shining; legs black; in the female there is a broadly interrupted supra-marginal band, and a small patch along the suture of yellow scales, while in the male there are only a few white scales here and there; pygidium

white in the male and having a broad, basal, transverse black band, yellow in the female and without trace of a black transverse band; propygidium and abdomen clothed with scales; head deeply punctured, setulose, clypeus acuminate, somewhat sharply bi-dentate at apex; prothorax diagonally attenuate laterally in the anterior part, emarginate from the median part towards the base, not much convex, not sulcate longitudinally at middle, very closely punctate and clothed with dense, long black hairs; scutellum long, sharp, punctulate and without scales; elytra elongate, gradually attenuate from the shoulder towards the apex, depressed on each side of the suture before the median part, humeral angle distinct and very lateral, and continued as far as the apex in a rounded, not highly raised costa, feebly punctate and slightly bristly but with the sutural and marginal row of bristles longer and stiffer than those on the discoidal part; pygidium vertical in the male; outer teeth of anterior tibiæ nearly equi-distant but with the apical one smaller than the intermediate and the basal ones; hind femora not much thickened in the male; tibiæ as long as the thighs, slightly swollen at about the median part, simple, apical spur moderately long; basal joints of tarsi short, transverse, somewhat triangular, fifth joint longer by one-half than all the others taken together, slightly tri-dentate beneath, claw nearly as long as the fifth joint, curved and emarginate at the base beneath; in the female the hind legs are hardly swollen, but in both sexes they are sprinkled with scales and are bristly and hairy.

Length 8–10 mm.; width 5½–6 mm.

*Hab.* Cape Colony (Namaqualand).

PACHYCNEMA LINEOLA, Burm.,
Handb. d. Entom., iv., 1, p. 63.

Similar in shape to *P. namaqua;* the head and prothorax are black, the latter has a very distinct lateral margin of white scales in both sexes, but the anterior margin has none, and in the basal one there is a short median band of them above the scutellum which is densely scaly; elytra reddish brown, opaque; the abdomen and pygidium are clothed with white or flavous scales, but the edges of the pygidium are narrowly denuded all round, and in the centre there is a longitudinal denuded line reaching from base to apex in both sexes, as a rule, but in some female examples this band is hardly distinct; the sculpture and vestiture of the head and prothorax are similar to that of *P. namaqua*, but the elytra are not so depressed across the sutural part at about

the median part, and in the male only the suture and the outer margin are bristly, in the female, however, the whole surface is covered with bristly hairs; hind legs as in the preceding species, but the fifth joint of the tarsi is more serrulate beneath in the male.

Length 10–11 mm.; width 6–6½ mm.

*Hab.* Cape Colony (Namaqualand).

PACHYCNEMA SAGA, n. spec.

Intermediate in form between *P. namaqua* and *P. lineola;* it is a little more elongated, the humeral callus on the elytra is very little developed, and there is on each side two not much raised but distinct costæ; the head and prothorax are similar in shape and sculpture, but there is a distinct longitudinal groove in the middle, and as often as not a marginal band all round of flavescent scales in both sexes; the scutellum, which is narrower and slightly shorter than in the other two species, is covered with scales, but the elytra, which are ochraceous yellow, are without any in both sexes, and have on each side three discoidal as well as a sutural and an outer marginal row of long, black bristles; the pygidium is vertical and covered with white scales in the male, yellow in the female, and the propygidium has a distinct apical, transverse, fuscous or black band; hind legs as in the two preceding species, fifth joint of tarsi slightly tri-dentate beneath.

Length 9–10 mm.; width 5½–6 mm.

*Hab.* Cape Colony (Worcester).

PACHYCNEMA ABDOMINALIS, Burm.,
Handb. d. Entom., iv., 1, p. 1099.

*Anisonyx abdominalis*, loc. cit.

*P. nigro-limbata*, Péring., Trans. S. A. Philos. Soc., vol. iv., 1888, pt. 2, p. 102.

Black, clothed on the head, prothorax, and scutellum with long, black hairs interspersed in the male with greyish-white ones; abdomen and pygidium clothed with white scales; elytra light testaceous brown, edged all round, and also along the suture, with a fuscous band, along the posterior part of the suture there is a narrow line of silvery-white scales; legs black; head rugose; clypeus elongated, a little narrowed, emarginate at apex, and with the two apical teeth distinctly reflexed; prothorax obliquely attenuate laterally in the anterior part, distinctly emarginate towards the base,

and with the posterior angle sharply projecting, it is deeply and closely punctured; scutellum triangular, not elongate, as long as broad, not scaly; elytra elongato-quadrate, rounded singly at apex, plane with the humeral callus conspicuous and elongate longitudinally, moderately punctulate, each puncture bearing a very short, black bristle, decumbent but erect, however, in the basal part, suture and outer margin with seriate black bristles; propygidium clothed along the margin only with white scales in both sexes; pectus clothed with dense greyish hairs; anterior tibiæ strongly tri-dentate; the teeth are equi-distant, the apical one is longer than the intermediate; the anterior tibiæ have a distinct, inner spur; the hind ones are longer than the thigh, moderately swollen in the male, less so in the female; the hind tarsi are of nearly equal length in both sexes, but more broadly triangular in the male; the fifth joint is as long as the four preceding ones taken together, and tri-denticulate beneath.

Length 8–9 mm.; width $4\frac{1}{2}$–5 mm.

This species is intermediate between *Pachycnema* and *Pherocoma*, and it is difficult to decide where to place it; but the hind claw is simple, and it is therefore a *Pachycnema*. Burmeister included it among his *Anisonyx;* but the facies is very different.

*Hab.* Cape Colony (Namaqualand).

## PACHYCNEMIDA, n. gen

Shape and facies of *Pachycnema*, but the upper lobe of the maxillæ is very slender and penicillate; the maxilla is armed on each side with four falcate teeth facing each other, but gradually decreasing in size from the uppermost, the apical joint of the maxillary palpi is nearly sub-oblong and compressed; the clypeus, however, is not acuminate; the other generic characters are as in *Pachycnema*.

### Pachycnemida signatipennis, Burm.,

Plate XLII., fig. 4.

Handb. d. Entom., iv., 1, p. 66.

*Pachycnema farinosa*, Péring., Trans. S. Afric. Phil. Soc.

Light chestnut, densely clothed with lanceolate white appressed scales, and a very brief, greyish pubescence on the head and prothorax; scutellum scaly, elytra covered with white scales, denser and more closely set in parts, and thus forming on each side three narrow, elongate patches on the anterior part and two long,

broad ones on the posterior; abdomen clothed with white scales; under side and legs clothed with very dense white hairs, which are appressed and squamiform on the hind legs; head rugose, clypeus short, parallel, dentate on each side at tip; prothorax gradually attenuate laterally from the base to the anterior angle, not grooved longitudinally; scutellum very long and very sharp; elytra ampliate and rounded from the humeral angle to about the median part, gradually narrowed from there to the apex; the humeral angle is very distinct, and there is on each side three broad but very shallow longitudinal furrows, in which the ovate scales are denser; the pygidium is slightly inclined forward, but the abdominal segments are not compressed in the centre; the three outer teeth of the anterior tibiæ are set close to one another, but are not connate, and the basal one is shorter than the other two; the hind tibiæ are very swollen, longer and somewhat thicker than the femora, simple, but somewhat deeply excavate inwardly at apex under the apical spur; basal joint of hind tibiæ obliterated, the other three fused, but with three short teeth underneath, last joint three times as long as all the preceding taken together, and armed underneath with a strongly triangular tooth, claw as long as the apical joint, dentate underneath at the middle.

Female unknown.

Length 10–10½ mm.; width 6–6½ mm.

*Hab.* Cape Colony (Namaqualand).

I found my examples on grasses, not in flowers like the other species of *Pachycnema*.

## Gen. HOPLOCNEMIS, Har.,

Coleopt., Heft. v., p. 123, 1869.

*Hoploscelis*, Burm.

Mentum very elongate, straight laterally, and strongly acuminate, deeply foveate, labial palpi thick, lobe of maxillæ densely hairy at the tip, but not inwardly; no inner tooth; apical joint of maxillary palpi long, swollen inwardly, emarginate outwardly; head carinate on each side above the eye, clypeus long, sharply attenuate laterally, truncate at tip and having on each side three sharp, vertical teeth; head with a frontal tubercle or not; prothorax longer than broad, or *vice versâ*, slightly rounded laterally, narrower than the elytra which are somewhat ampliate laterally below the humeral part, gradually attenuated towards the apex where they do not quite cover the propygidium, nearly plane, but having a more or less

strongly pronounced diagonal round costa reaching from the humeral to the apical callus; the pygidium is vertical or slightly flexed forwards; the abdominal segments are much compressed laterally; the pectus is very hairy, and the propygidium and the abdominal segments are completely or partly scaly; inner claw of the anterior tarsi cleft in the middle, outer claw basal and quite rudimentary, claws of the intermediate and posterior legs simple and single; anterior tibiæ strongly tri-dentate, the teeth about equidistant; posterior femora and tibiæ enormously developed in the male, and with the inner angle, and sometimes the outer (*crassipes*) produced into a long, acute, or pluri-dentate process; in this sex the joints of the hind tarsi are very short and not free.

The insects included in this genus are far from common. They are, I believe, as a rule, crepuscular or nocturnal, although I am informed that *H. armata* has been caught on the wing in the afternoon. I have found it, and also *H. crassipes*, on a sultry morning, crawling on the ground. *H. auriventris* I have never caught flying in the daytime, and most of my examples were found by me, either dead or nearly so, but still limp, and in the act of being dragged by ants to their nests.

The genus is strictly South African, and seems to be restricted to the Cape Colony; it includes eight species.

*Key to the Species.*

A². Posterior tibiæ of the male with a terminal spur.

B². Prothorax very deeply grooved in the centre.

Apical inner part of posterior femora produced into a very long, sharp, arcuate process:

Head with a bifid frontal tubercle in the male .. .. *hylax.*

Head with a non-bifid frontal tubercle .. .. .. .. *spectabilis.*

Head without a frontal tubercle .. .. .. .. .. .. *koikoina.*

B¹. Prothorax not deeply grooved in the centre.

*a*². Head with a small tubercle.

Apical inner part of posterior tibiæ slightly produced into a short process tri-dentate at tip, hind femora simple .. *auriventris.*

Apical inner part of posterior tibiæ produced into a long process tri-dentate at tip, hind femora dentate.. .. .. *armata.*

*a*¹. Head without tubercle.

Apical inner part of posterior tibiæ moderately long, bifid at tip and strongly tri-dentate on each side.. .. *mutica.*

A[1]. Posterior tibiæ without a terminal spur.

Prothorax with a tubercle on the anterior margin; posterior tibiæ very convex and produced on each side into a very long process, the upper sharply spinose and the other blunt, quadri-dentate .. *crassipes.*

Prothorax without tubercle; posterior tibiæ scooped out horizontally at the tip, bi-spinose inwardly and with a bifid process trongly serrate outwardly.. .. .. .. .. .. .. .. .. *fuliginosa.*

HOPLOCNEMIS HYLAX, Fabric.,
Plate XLII., fig. 2.
Syst. Entom. Append., p. 817.
Oliv., Entomol., i., 3, p. 50, pl. xi., fig. 95 *a–b.*
Lacordaire, Atlas, pl. xxix., fig. 4*a.*

Male: Head, prothorax, and legs piceous brown; elytra cherry-red; head very rugose, sharply carinate laterally, clypeus strongly acuminate and sharply tri-dentate on each side; in the centre there is a greatly compressed, very high longitudinal carina strongly bifid at tip, it is pubescent on the anterior part and fringed laterally with long, black hairs; prothorax one-third broader than long, a little ampliate laterally in the middle, not much attenuated in front, declivous in the anterior part, but not convex on the disk which is very deeply sulcate longitudinally from the anterior declivity to the base which is marginate, it is glabrous on the upper side, and covered with deep, round punctures, somewhat scattered, and fringed laterally with dense, black hairs; scutellum long, narrow, moderately sharp at tip, and deeply punctate; elytra broader at the base than the prothorax, obliquely attenuated from the humeral part to the apex where they become gradually rounded, somewhat depressed on the upper side, but having a very broad, somewhat rounded costa extending diagonally from the shoulder and ending at the posterior callus; the margin is slightly raised and has a series of short, black bristles, and the surface is covered with non-contiguous, but nevertheless somewhat closely set punctures bearing each a very short, black bristle; propygidium and abdomen covered with contiguous yellowish scales interspersed with hairs, pygidium vertical, free from scales and irregularly punctured; pectus very hairy; hind femora very thick, hind tibiæ shorter than the thigh and with the inner apical part produced into a long, sub-triangular process sharp at tip, with the outer face somewhat deeply scooped out, and the inner bluntly serrate; first basal joint of hind tarsi nearly obliterated, the two following short, somewhat transverse, plainly soldered, fourth sharply and very distinctly dentate beneath, fifth nearly twice

as long as the first four put together, curved, and as long as the claw.

Female: Smaller than the male. The teeth of the clypeus are much smaller, the frontal carina is reduced to a small, rounded tubercle; the punctures on the prothorax are equally deep but set close to one another; the shape and sculpture of the elytra and the vestiture of the propygidium and abdomen are similar; the femora are also thick, the tibiæ are thickened, moderately deeply scooped out at apex but simple, and the basal joints of the tarsi are longer, and apparently free.

Length 13–16 mm.; width 8–10 mm.

*Hab.* Cape Colony (Beaufort West, George, Worcester).

### Hoplocnemis spectabilis, n. spec.

*H. crassipes*, Lacord., Atl., pl. xxix., fig. 1; nec. Oliv.

Male: The description of *H. hylax* applies in most points to this species, but it differs in colour and in the shape of the cephalic horn and of the posterior tibiæ; the colour is dull black on the upper side, the hind legs are also piceous black; the club of the antennæ is rufescent; the shape of the head and clypeus is similar but the cephalic horn is compressed laterally and sharply triangular; the prothorax is a little more pubescent on the discoidal part, and the median sulcus is broader; the anterior tibiæ are not quite so robust, the inner part of the posterior tibiæ is more sharply prolonged, and the inner edge of the process is somewhat sharply quadri-dentate; tarsi as in *H. hylax*.

Female unknown.

Length 15 mm.; width 9½ mm.

*Hab.* Cape Colony (Ladismith).

### Hoplocnemis koikoina, n. spec., Plate XLII., fig. 1.

Very similar to *H. spectabilis* in shape and build, but the elytra are occasionally rufescent brown, the hairs clothing the prothorax are denser, there is no cephalic tubercle in either sex, the propygidium and the abdominal segments are not scaly, but fringed with long fulvous hairs, and the apical inner process of the hind tibiæ, which is as long as in *H. spectabilis*, is bluntly serrate on each side. The female is distinguished from the male only by the simple and more slender hind tibiæ.

Length 13–15 mm.; width 7½–9½ mm.

Apart from the outward characters distinguishing *H. koikoina*

from *H. spectabilis*, the shape of the genital armature of the male differs also; the forceps being spatulate at apex in *koikoina* and straight in *spectabilis*.

*Hab.* Cape Colony (Namaqualand).

HOPLOCNEMIS AURIVENTRIS, Burm.,
Plate XLII., fig. 4.
Handb. d. Entom., iv., 1, p. 55.

Head, prothorax, and legs piceous black, elytra piceous red, propygidium and abdominal segments clothed with yellow scales; head very rugose, villose, and having in the centre a sharp, conical, not compressed tubercle equally developed in both sexes; clypeus sharply six-dentate on each side; prothorax obliquely ampliate laterally from the anterior angle to about one-third of the length whence it is slightly and roundly attenuate up to the base, it is deeply and closely punctured, has a shallow median groove, is briefly pubescent, and fringed with longish black hairs; the scutellum is somewhat narrow, moderately long, and deeply pitted; the elytra are gradually ampliated from the shoulder to the median part where they are broadest, and moderately attenuate from there towards the apex; the diagonal costa on each side is distinct in the male, but less so in the female, in which, moreover, the elytra are also a little less ampliate laterally in the middle, they are somewhat closely and deeply punctured, each puncture bearing a short, black bristle, and in specimens which have not been rubbed, there are also in the median discoidal part, from the base to past the middle, some appressed, slender, flavescent scales not at all closely set; pygidium vertical, slightly convex, and without scales; in the male the hind femora are thickened; the hind tibiæ are as broad but shorter, somewhat deeply excavated inwardly at apex, and they have on the inner side of the excavate part a short, sharp spine set next to the apical spur, and below it a short, blunt process serrate outwardly in the male; in the female the hind tibiæ are thick but simple.

Length 10–11½ mm.; width 6½–8 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Caledon, Malmesbury).

HOPLOCNEMIS ARMATA, Burm.,
Plate XLII., fig. 5.
Handb. d. Entom., iv., 1, p. 54.

This species greatly resembles *H. auriventris*, the facies, size, and sculpture being similar; some of my examples, however, have

testaceous red elytra; the propygidium and abdomen are clothed also with appressed flavous scales, but the hind legs, which are reddish brown, differ. The hind femora have beneath a sharp tooth at about the median part, and connected with a sharp carina reaching to the apex; the tibiæ are also strongly carinate inwardly, the carina being strongly serrate, and the apical inner process is very elongate, strongly but bluntly dentate outwardly and is five-dentate at tip, the upper apical tooth is small but very distinct, and the apical spur which is set close to it is long and sharp; the shape of the genital armature is also different from that of *H. auriventris*, but the female is not distinguishable from that of the latter.

Length 10½–12 mm.; width 6½–9 mm.

*Hab.* Cape Colony (Worcester).

### Hoplocnemis mutica, Burm.,
### Plate XLII., fig. 6.
### Handb. d. Entom., iv., 1, p. 55.

This species also resembles *H. auriventris*, and more especially the red-winged examples of *H. armata*, but it is only on the propygidium that there are a few scattered flavescent scales, the abdomen having none. In the male the frontal tubercle is obliterated; the colour is black, the elytra only being brick-red, the sculpture and vestiture, with the exception of the scales on the abdomen, are as in *H. armata*, but in the hind legs, the trochanters of which are sub-spinose, there is no tooth beneath, and the inner apical process of the hind tibiæ is nearly as much developed as in *H. armata*, but broader, strongly tri-dentate inwardly, bi-dentate at tip, and having four smaller but distinct teeth outwardly; the forcipate clasps of the genital armature are somewhat different from those of the two preceding species.

Female unknown.

Length 12½ mm.; width 8 mm.

*Hab.* Cape Colony (Victoria West).

### Hoplocnemis fuliginosa, Burm.,
### Plate XLII., fig. 7.
### Handb. d. Entom., iv., 1, p. 56.

Head and prothorax fuscous black, elytra and legs reddish brown; abdomen and pygidium covered with yellowish scales; head rugose, not tuberculate in either sex, clypeus acuminate, the two lateral apical teeth set very close to one another, it is densely hairy, the hairs being black; prothorax obliquely attenuate laterally in the

anterior part for half the length, and slightly rounded in the posterior, slightly convex, deeply and closely punctured, densely hairy, and fringed with longer hairs laterally; scutellum long, sharp at tip, impressed longitudinally in the middle which is bare, but the sides are covered with slightly flavescent scales; elytra gradually and moderately ampliate laterally in the middle, the humeral callus is not as strongly developed as in the other species of *Hoplocnemis*, and the oblique, rounded dorsal costa is not very distinct, they are covered with small, elongate, flavescent scales not closely set, and have, in addition to the sutural and marginal rows of black bristles, several series of equally long, black bristles on each side; the elytra barely reach to the basal margin of the propygidium which is covered with very closely set scales, while on the pygidium the scales are not contiguous; the latter is vertical in the male, and the two apical abdominal segments are not scaly; posterior femora of the male very much thickened and convex on the outer face, tibiæ a little shorter than the thigh, not very swollen but dilated at apex, horizontally scooped out there; the inner apical part is produced into two linear spines, and the outer is bifid at tip and serrate along the outer margin; the four basal joints of the tarsi are very short, and nearly fused, the fifth is more than twice as long as the four basal ones taken together, and is somewhat compressed, the claw is curved, compressed, and sharp inwardly, but the apical tectiform part is scooped outwardly beneath.

The female is like the male but usually smaller, the femora and tibiæ are normal, and the claw of the hind tarsi is simple.

Length 9–10 mm.; width 5–6½ mm.

*Hab.* Cape Colony (Graham's Town, Uitenhage, Port Elizabeth).

HOPLOCNEMIS CRASSIPES, Oliv.,
Plate XLII., fig. 3; Plate XLIV., fig. 3.
Entom., i., 3, p. 51, pl. xxiii., fig. 200 *a–c*.

Head, prothorax, and scutellum black, elytra and legs cherry-red; head very rugose and having in the centre a slight transverse impression abutting on a transverse, very slightly raised ridge separating the head from the clypeus which is sharply acuminate, and the two anterior lateral teeth of which are set very closely together; the head and clypeus are fringed with fulvous hairs; prothorax attenuate laterally in front for rather more than one-third of the length and sub-parallel from there, fringed with dense black or light fulvous hairs, not very convex, not grooved longitudinally, but slightly impressed near the base, and having in the anterior part a

median, shallow impression with the anterior margin tuberculate in front in both sexes; scutellum with a double row of punctures nearly obliterated at the base; elytra moderately obliquely ampliated laterally from the shoulder to a short distance from the middle, and obliquely attenuated from there to the apical part; the humeral callus is distinct, but only slightly prolonged towards the median part of the disk which is not costate, the supra-apical callus is distinct, the surface is deeply but not closely punctured, each puncture bearing a very small bristle; propygidium and upper sides of abdomen clothed with yellow scales; pectus and legs clothed with black, or fulvous dense hairs; pygidium sloping forward and abdominal segments constricted in the male, the hind femora being greatly thickened and the tibiæ convex, tectiform, broadly scooped beneath, and with the apices greatly produced, the inner one into a very long, broadly spiniform process, and the outer into a blunter but also long process, scooped inwardly and tri-dentate at tip; there is no trace of an apical spur; the four basal joints of the tarsi are set very closely to one another, the fifth has a small but distinct tooth beneath, and the claw which is as long as the five joints taken together is strongly sinuate at tip and somewhat slender. In the female the elytra are slightly more parallel, and the hairs on the sides of the abdomen are very dense and very long.

Length 11–13 mm.; width 7–8 mm.

*Hab.* Cape Colony (Worcester).

## Tribe HOPLIINI.

### Group HETEROCHELIDES.

A². Clypeus straight at the tip, seldom with slightly rounded angles.

Anterior tibiæ tri-dentate, all three teeth somewhat connate at the base, all claws double, equal, diverging .. .. .. .. *Dichelus.*

Anterior tibiæ tri- or four-dentate, all the teeth somewhat connate at the base, hind claws double but unequal and appressed, or single and simple .. .. .. .. .. .. *Heterochelus.*

Anterior tibiæ bi- or tri-dentate, apical tooth not connate. Scutellum very long, sharply triangular .. .. .. .. .. *Omocrates.*

Scutellum rectangular, broad and triangular at the apex .. *Goniaspidius.*

Anterior tibiæ bi-dentate, but with the apical tooth bifid and broadly separated from the basal one:

Lobe of maxillæ armed with teeth; prothorax very convex *Dicranocnemus.*

Lobe of maxillæ without teeth; prothorax plane .. .. *Nanniscus.*

A¹. Clypeus parabolic.

Body elongate, elytra very little sinuate laterally, claws of the intermediate legs simple underneath in the male .. .. .. *Diaplochelus.*

Body not elongate, elytra strongly sinuate laterally, claw of the intermediate legs with a robust sub-lateral tooth in the male .. .. .. .. .. .. .. .. .. .. .. .. .. .. *Bizanus.*

## Gen. DICHELUS, Serv.,

Encyclop. Méth., x., 1825, p. 373.

Guér., Iconogr. d. Règn. Anim. Insect., pl. xxv., figs. 8, 8*a*, 8*b*.

Mentum elongate, a little ampliated laterally at a short distance from the base, or occasionally towards the median part, not deeply constricted towards the apex, but more or less deeply emarginated there at the point of insertion of the labial palpi, apical part transverse with the angles sharp and penicillate, but occasionally only with a few hairs; upper lobe of maxillæ strongly dentate inwardly and penicillate or not at the tip, the number of the sharp hooked teeth is five (*D. villosus*) or four, but with the basal one bifid (*dentipes*), or three (*laticollis*, &c.); last joint of labial and maxillary palpi more or less strongly fusiform and truncate at the tip; clypeus sub-parallel, truncate, and straight at apex, but with the angles sharply dentate and reflexed, and with two smaller teeth in the middle; the clypeus is separated from the head by an impressed, transverse line, and is angular laterally at the base; antennæ nine-jointed, club nearly as long as all the four preceding joints taken together; prothorax attenuate sub-obliquely laterally from the median to the apical part, not very convex, sulcate in the middle only towards the basal part; scutellum sub-ogival, rounded at tip; elytra ampliate laterally at the humeral part, more or less deeply sinuate laterally, distinctly narrowed from below the humeral part towards the apex where they leave the greatest part of the pro-pygidium exposed, as well as the edge of the dorsal part of the abdominal segments; pygidium declivous and sloping forward in the male, sub-horizontal in the female, abdomen strongly compressed laterally in the male, but much less so in the female; metasternum very broad; hind legs of the male very strongly developed, hind coxæ almost transverse, with the hind margin sharply carinate and angular, and when the femora are greatly developed projecting much beyond the abdominal segments; anterior tibiæ with three outer teeth curving slightly downwards, nearly connate at the base; the two basal ones are set at right

angles and the apical one is slightly oblique, there is no inner apical tooth and the claws of all the legs are double, strongly divaricating, and cleft at the tip.

In the figure and details given by Guérin-Méneville, *loc. cit.*, the hind legs only, the claws especially, are correct.

## *Key to the Species.*

### Male.

A². Trochanters of hind femora produced into a long spine.

Elytra without any scales; hind tibiæ grooved underneath from the large median minor tooth, and having another acute inner tooth near the knee (pl. xlii., fig. 23) .. .. .. .. .. *dentipes.*

Elytra without any scales; hind tibiæ with a small inner tooth near the knee and a large median one grooved from apex to base (pl. xlii. fig. 24) .. .. .. .. .. .. .. .. .. *expansus.*

Elytra with a juxta-sutural line of whitish scales; hind tibiæ not grooved underneath, and having a small inner tooth near the knee and a conspicuous median one (pl. xlii., fig. 26) .. .. *acanthopus.*

Similar to the preceding species, but elytra with three bands of whitish scales .. .. .. .. .. .. .. .. .. .. .. *villosus.*

Elytra with three broad bands of dense ashy-grey scales; prothorax scaly; hind tibiæ as in *D. acanthopus* .. .. .. .. *vittatus.*

Elytra with a juxta-sutural line of white scales; pygidium not scaly; hind tibiæ short, very curved, grooved beneath, and with only a small inner tooth near the knee .. .. .. .. .. .. *luctuosus.*

Elytra with a discoidal and a juxta-sutural interrupted line of white scales; hind trochanters slender and very sharp; hind tibiæ not curved, compressed, grooved underneath, and simple (pl. xlii., fig. 28) .. .. .. .. .. .. .. .. .. .. *simplicipes.*

Elytra with a discoidal and a juxta-sutural interrupted line of scales; hind tibiæ curved, grooved, dentate on each side of the basal part of the groove only; trochanters strongly dentate, femur with a short basal spine; pygidium non-scaly .. .. *holosericeus.*

A¹. Trochanters of hind femora with a very short but sharp spine.

Body black, elytra testaceous and with three lines of flavescent scales; hind tibiæ carinate underneath, deeply emarginate near the knee, and with the angles of the emargination sharp .. *lucidus.*

Body without scales, black; hind femora simple; tibiæ short, very curved, carinate underneath, sharply dentate inwardly, and produced at apex into a very strong mucro (pl. xlii., fig. 32) *laticollis.*

Body without scales; elytra brownish-red; hind femora with the inner tooth of the knee longer and sharper than the outer one; hind tibiæ short, broadly dilated towards the apex, deeply grooved underneath, and with the inner margin of the excavation dentate near the knee and also at the apex (pl. xlii., fig. 25) *denticeps.*

Body without scales; elytra flavous; hind legs simple .. .. *pallidipennis.*

FEMALE.

Elytra without any scale, costulate, and very rugose; pygidium clothed with greyish appressed hairs .. .. .. .. .. .. *zuluanus.*

DICHELUS DENTIPES, Fabric.,

Plate XLII., fig. 23.

Spec. Insect., i., p. 44.

Oliv., Entomol., i., 5, p. 74, pl. vi., fig. 66.

Black, with the elytra testaceous red or with the basal part only broadly testaceous red, and the rest fuscous or entirely black, tarsi and claws piceous red; head briefly but densely hairy and bristly laterally; prothorax very closely scabroso-punctate, briefly hairy, the hairs are black and longer on the sides than on the disk, along the base there is a narrow fringe of not closely set appressed, yellowish hairs; scutellum clothed with small, contiguous, yellow scales; elytra broadly ampliated at the base and obliquely narrowed laterally from the humeral part to the apex, distinctly bi-costate on each side, but with only the first costa reaching past the median part, very closely and deeply punctured, shining, but clothed with minute greyish appressed hairs; apical part of propygidium and the whole of the pygidium clothed with small, contiguous, bright yellow scales; abdominal segments with a small yellowish patch on the upper side; pectus clothed with a black pubescence; hind femora greatly developed, villose like the tibiæ, simple but sharply bi-dentate on each side of the articulation of the knee, and having the trochanters produced into a very long, sub-vertical spine; hind tibiæ broadly but not very deeply grooved underneath, dentate on the inner side near the knee having a strong, nearly median spine on the outer, and also very strongly mucronate inwardly at apex; all the claws are double, equally long, and slightly cleft at the apex.

Female: Black, with the elytra light testaceous, clothed with dense villose, greyish hairs except on the elytra and the pygidium, the latter and also the apical part of the propygidium are entirely clothed with bright yellow scales.

Length $6\frac{1}{2}$–$7\frac{1}{2}$ mm.; width 4–$4\frac{3}{4}$ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Worcester, Malmesbury).

DICHELUS EXPANSUS, n. spec.,
Plate XLII., fig. 24.

Male: Resembles *D. dentipes* in general build and also in the shape of the hind legs, but it is differentiated by the colour of the body which is black, but has a greenish, metallic tinge, the elytra are redder and opaque, but clothed with the same greyish, appressed pubescence, and the legs are of the same colour as the elytra.

Female: Like the female of *D. dentipes*, but it has two distinct denuded patches on each side of the pygidium.

Although very closely allied to *D. dentipes* this species is different. It appears also later in the spring.

Length 6–7 mm.; width 4–$4\frac{3}{4}$ mm.

*Hab.* Cape Colony (Cape Town, Malmesbury, Stellenbosch, Paarl).

DICHELUS ACANTHOPUS, Burm.,
Plate XLII., figs. 26, 48.*
Handb. d. Entomol., iv., 1, p. 108.

The description of *D. dentipes* suits also this species, but the facies is not so robust, the colour of the prothorax is slightly greenish black, that of the elytra varies also from red-brown to fuscous, but instead of having appressed hairs only they have a juxta-sutural band of greyish-white ones not closely set and often partly obliterated; the pygidium of the female has two denuded lateral patches like the female of *D. expansus;* the hind tibiæ of the male are sharply carinate underneath and not grooved, but the median inner tooth and the apical mucro are similar to those of the two preceding species.

Length 5–$6\frac{1}{2}$ mm.; width 3–4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch).

DICHELUS VILLOSUS, Burm.,
Handb. d. Etomol., iv., 1, p. 109.

Black, with the elytra chestnut-brown, but occasionally black; legs piceous red and occasionally reddish brown; the head and prothorax are as in *D. dentipes*, but the elytra are narrower though equal in length, distinctly bi-costulate on each side, and they have

* Fig. 48 is that of the small development.

each three bands of elongate, somewhat hair-like, greyish-white or slightly flavescent scales, often partly obliterated, but with the broader juxta-sutural band always more distinct; hind femora simple but with the spine of the trochanters greatly developed; hind tibiæ also as in *D. dentipes*, but not at all grooved or concave underneath, and therefore not carinate inwardly. The shape of the tibiæ is nearly the same as that of *D. acanthopus*, from which species it is at once distinguished by the more elongate facies; the female is like that of *D. dentipes*, and the pygidium has no denuded patches.

Length 7–7¼ mm.; width 4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch).

DICHELUS LUCTUOSUS, n. spec.

Male: Black, shining, head and prothorax clothed with black villose hairs, prothorax with an interrupted narrow band of white scales; scutellum scaly, elytra with a post-median juxta-sutural narrow band of white scales, pygidium not scaly; the two median teeth of the clypeus are very small, yet distinct; the elytra are a little convex, not costulate, and are strongly callose at the apex, they are sparsely punctate, the punctures of the sides and in the posterior part bearing a somewhat thick short decumbent hair; hind femora simple, but with the trochanters produced into a long, subhorizontal spine; hind tibiæ compressed, grooved underneath, but with the edges of the groove simple and the inner apical parts strongly mucronate; under side briefly villose, the hairs black, upper side of abdominal segments with a small patch of white elongate scales.

Female unknown.

Length 6 mm.; width 3½ mm.

*Hab.* Cape Colony (Cape Town).

This species seems to be very rare. It very much resembles *D. denticeps* in general form, but is at once distinguished from it by the long spine of the trochanters, which is absent in the latter, and also by the colour of the elytra and the shape of the hind tibiæ.

MONOCHELUS VITTATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 95.

Black, with the elytra chestnut-brown, and the legs chestnut-brown or chestnut-red; head and prothorax sub-villose, but clothed also under the hairs with greyish or slightly flavescent scales which become much denser in the posterior part; scutellum densely scaly;

elytra with three longitudinal bands of sub-flavescent scales; pygidium scaly; clypeus with four, distinct, nearly equal teeth; longitudinal basal sulcus of prothorax not distinct; elytra attenuate laterally towards the apex, costate with the intervals filled with round, closely set scales, the outer band is divided at the base by the non-scaly humeral callus; edge of propygidium densely scaly; trochanters produced into a very long, sharp, sub-horizontal spine, hind femora dentate on each side of the knee; hind tibiæ like those of *D. dentipes*, but not grooved underneath; no apical spur; joints of hind tarsi sub-triangular, somewhat compressed; all the claws double, of very equal length, and very slightly cleft.

Female not known with certainty.

Length 7–7½ mm.; width 5 mm.

*Hab.* Cape Colony (? Worcester).

DICHELUS SIMPLICIPES, Burm.,

Plate XLII., fig. 28.

Handb. d. Entomol., iv., 1, p. 119.

Male: Black, with the elytra dark chestnut-brown or reddish brown, legs of the same colour as the elytra; upper surface with a slight metallic tinge; elytra with two interrupted bands of white scales on each side; head and prothorax densely villose with the hairs black; along the base of the latter there is a faint trace of a narrow band of appressed whitish squamose hairs; scutellum densely scaly, the scales elongate; elytra somewhat convex in the anterior part, and having longitudinal, shallow depressions on each side separated by a slightly raised, scarcely costulate space, in the juxta-sutural depression there is a band of moderately closely set elongate white scales beginning at about the median part and reaching to the apex, while the discoidal band begins at the base of the second depression, and reaches to past the median part; the hind femora, although robust, are not as much developed as in the preceding species, and the spine of the trochanters is very slender, but long, the tibiæ are compressed, moderately dilated gradually towards the apex, simple but a little emarginate near the knee and end in a moderately long apical inner mucro; the propygidium is edged with whitish scales, and the ventral segments and the metasternum have a patch of white scales, the pygidium has none, but occasionally there are a few remote flavescent squamose hairs at the apex.

Female unknown with certainty.

Length 5 mm.; width 3 mm.

*Hab.* Cape Colony (Malmesbury, Paarl, Caledon).

DICHELUS HOLOSERICEUS, Burm.,
Plate XLII., fig. 27.
Handb. d. Entomol., iv., 1, p. 111.

Male: Shape, size, and sculpture of *D. simplicipes;* the elytra, however, are redder, although they are also occasionally infuscate, or even black; the two white bands of scales are similar, and they are faintly punctured, with the punctures somewhat seriate; the scutellum has no scales, but it has often some flavescent, somewhat remote appressed hairs; the hind legs are, however, very different and approximate to those of *D. luctuosus;* the hind femora are very robust and have the spine of the trochanters strong, subhorizontal but not very long, and above the point of the spine there is a short but very distinct femoral tooth; the hind tibiæ are arcuate, shallowly grooved underneath with the two edges simple, equal, and projecting at the apex in a very long, arcuate inner mucro, thus resembling entirely those of *D. luctuosus.*

Female: Black, with the elytra testaceous, the pygidium, abdomen, and legs reddish; elytra deeply and broadly punctate, sparsely pubescent.

Length 5–5½ mm.; width 3–3½ mm.

*Hab.* Cape Colony (Cape Town, Oudtshoorn, Clanwilliam, Port Elizabeth).

DICHELUS LUCIDUS, n. spec.

Black, not distinctly metallic, shining, elytra testaceous and having some traces left on each side of the bands of obliquely disposed greyish-white scales, pygidium clothed with yellow scales, anterior legs reddish; head and prothorax clothed with fulvous hairs, scutellum without scales; elytra with two faint costules on each side separating the three bands of scales, the juxta-sutural of which is the broadest and the most distinct, they are punctulate, not convex at the base, normally narrowed laterally towards the apex; propygidium scaly at apex, abdominal segments with a patch of flavescent scales; hind femora robust, but not very swollen, simple, but the two teeth of the articulation of the knee are very sharp, and the trochanters have a very short spine; the hind tibiæ are conspicuously emarginate at the base for a third of the length, compressed and laminate underneath with the upper angle of the lamina very sharp, and the apical one produced into a moderately long inner mucro; the bristles of the hind tarsi are fulvous.

Female unknown.

Length 6 mm.; width 3 mm.

*Hab.* Cape Colony (Caledon).

Dichelus laticollis, Burm.,
Plate XLII., fig. 32.
Handb. d. Entomol., iv., 1, p. 111.

Black, opaque, with the anterior tibiæ and the antennæ except the club reddish, the propygidium and pygidium are nude, and the abdominal segments have an upper patch of similar scales; head briefly bristly, the two median teeth of the clypeus are set close to one another, the prothorax is almost glabrous on the upper side but bristly laterally, hardly punctate in the posterior part, not densely so in the anterior, and it is less narrowed laterally in the anterior part than the other species of the genus; scutellum not scaly; elytra not conspicuously narrowed laterally towards the apex owing to their not being strongly sinuate below the humeral part, somewhat convex, and callose at the apex, deeply but not closely seriate, punctate and glabrous; the three outer teeth of the anterior tibiæ are less connate at the base than in the other species of the genus, and the two upper ones are a little more oblique; the hind femora are very robust, simple, with a distinct spine to the trochanters, the hind tibiæ are deeply emarginate at the base for one-third of the length and developed from there into a broad lamina, dentate on each side at the base and produced at apex into a very long, sub-transverse inner mucro.

Female: Like the male but still more glabrous on the prothorax; hind tibiæ with a very distinct apical spur.

Length $5\frac{1}{4}$–7 mm.; width $3\frac{1}{4}$–4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Caledon, Heidelberg, Malmesbury, Clanwilliam).

Dichelus denticeps, Wiedem.,
Plate XLII., fig. 25.
Germ. Magaz., iv., 142.

Black, with the elytra and legs brick-red, scaleless except on the scutellum, and having a narrow band of yellowish scales on the edge of the propygidium and on the sides of the abdomen; head very rugose and clothed with fulvous hairs somewhat bristly and not dense, the two median teeth of the clypeus are nearly obliterated, and the outer angles are proportionately sharper and more recurved; prothorax only slightly narrowed laterally towards the anterior part, scabroso-punctate but not along the base, the punctures bear each a flavescent, erect hair but are not very dense; scutellum somewhat ogival; elytra a little convex, normally attenuate laterally below the

shoulder, but short, and leaving nearly the whole propygidium uncovered; the pygidium slants very obliquely forwards; the hind femora are very robust and simple, but the inner part of the articulation of the knee is sharper than the outer; the trochanters are not spinose, the hind tibiæ are short, curved, broadly dilated inwardly from near the knee, grooved underneath with the two edges of the groove equal, but the inner one is slightly dentate near the inner apical mucro which is moderately long, sharp, and strong; the claws are double, but they are not as divaricating as in the other species of the genus, and the inner one is not quite as long as the outer, but the affinities of this species are undoubtedly more with species of the genus *Dichelus*, *D. laticollis* especially, than with any species of *Heterochelus*.

Female: Like the male, but with a few flavescent, slightly squamiform hairs on the elytra; hind tibiæ with a distinct apical spur.

Length 5–5½ mm.; width 3 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch).

### Dichelus pallidipennis, Blanch.,
### Catal. Coll. Entom. Mus. Par., p. 63.

Male: Black, with the elytra flavous, pygidium squamoso-villose, and having two denuded patches at the base; clypeus briefly quadri-dentate but with the two median teeth smaller than the outer; head and prothorax densely villose, the hairs greyish; the elytra have a few appressed hairs; the hind legs are moderately robust, simple, and the hind tibiæ have an apical spur, the hind claws are double, equal in length, divaricating, and both cleft.

Female like the male, but the pygidium is covered with greyish-white appressed hairs and has no denuded space.

Length 5 mm.

*Hab.* Cape Colony (no exact locality, but probably Malmesbury).

The only male example I have seen is the type.

### Dichelus zuluanus, n. spec.

Female: Black, with the elytra and legs piceous, scutellum, propygidium and upper side of abdomen with sub-flavescent elongate scales; head and prothorax scabroso-punctate, somewhat densely pubescent, the pubescence flavescent, the clypeus is quadri-dentate,

the teeth distinct and equal; posterior longitudinal impression of prothorax somewhat deep; elytra costulate, roughly punctured, clothed with an appressed greyish pubescence, not much ampliated laterally near the base, but normally attenuated towards the apex; pygidium vertical, clothed with greyish appressed hairs; intermediate claws cleft inwardly at about the median part; hind tibiæ densely bristly on each side.

Male unknown.

Length $6\frac{3}{4}$ mm.; width $3\frac{3}{4}$ mm.

Differs from the females of the other species by the much more distinctly costate and more roughly punctate elytra, and also by the pygidium covered with greyish hairs.

*Hab.* Natal (Eshowe).

(*Species which I have not seen or been able to identify.*)

DICHELUS FLAVIMANUS, Burm.,

Handb. d. Entomol., iv., 2, p. 497.

"Black, silky, opaque; clypeus quadri-dentate; antennæ, palpi, and anterior legs testaceous; sides of the abdomen scaly here and there.

Length $2\frac{1}{3}$ lin. ♂.

From Caffraria. Nearest to *D. holosericeus*, but differing somewhat from all the species by the slender, thin legs, the teeth on the anterior tibiæ of which are not set so close together, and by the non-dentate legs of the male. Clypeus with four marginal teeth, and rugose, like the head which is stiffly ciliate; prothorax rather flat than convex, having a finely raised outer margin ciliate with stiff bristles, opaquely silky in appearance, and with coarse, scattered punctures in which stiff bristles stand; scutellum with white scales; elytra broadly cordate, somewhat narrowed posteriorly, flatly convex, silky in appearance, indistinctly striate, and having some spare scabrose punctures in which are short, appressed hairs, colour black greenish; pygidium not shiny, black, ventral surface of abdomen and also the pectus dull shiny, clothed at the sides with scattered white scales; legs long, thin, nowhere remarkably thickened, shiny, black-brown, the anterior ones only light reddish yellow, the three teeth of the interior tibiæ finer, more separated; all the tarsi with two equal, cleft claws; antennæ and palpi testaceous, apex of the antennal club brown."

DICHELUS PLATYNOTUS, Burm.,

Handb. d. Entom., iv., 1, p. 112.

"Black, opaque, pilose, antennæ elytra and legs rufous; pygidium of the male with flavous scales.

Length $2\frac{3}{4}$ lin. ♂.

Communicated by Herr von Winthem. This species resembles closely D. *holosericeus*, but it is a little larger, everywhere punctate, and more densely hairy; the distinctive character is the much more depressed elytra, in every other respect it is similar, but the hairs and the scales are yellow instead of white, and the whole pygidium is covered with scales; the anterior legs are light red; in the male the hind thighs have the trochanter spinose, but are otherwise simple, but the articulation of the knee is aculeate on each side, the hind tibiæ are curved and have a basal tooth underneath near the knee, there is no apical spur."

DICHELUS NITIDISSIMUS, Burm.,

Handb. d. Entom., iv., 1, p. 113.

"Black, shining, elytra and legs red; prothorax sulcate, squamose behind; scutellum, scapulæ, and abdomen squamose.

Length 3 lin. ♂.

This species is closely allied to the preceding one (*D. denticeps*), but the extremely conspicuous sheen makes it resemble more closely still *D. bivittatus*. Head, anterior part of the prothorax, and body black, the apical margin of the clypeus is quadri-dentate, but the two median teeth are very feeble and set close to each other; the anterior part of the prothorax is shining, somewhat thickly punctulate as on the vertex of the head, and each puncture bears a hair, all of them being somewhat scattered; there is in the posterior part a furrow set with yellow scales which are also spread on the posterior part. Similar scales are to be seen on the scutellum, the scapulæ, the sides of the pectus, the propygidium and pygidium, the latter having two black patches; the elytra are very shiny and have some short, bristly hairs only on the sides and at the apex, they are entirely red, as are also the legs, the antennæ, and the palpi; in the male the long hind legs have the trochanters strongly spinose, and the thighs with a spine in the inner part of the articulation of the knee; the hind tibiæ are curved and simple but mucronate at the apex, and without apical spur; the hind tarsi are setose with the setæ long, and have two unequal claws, one of which is simple, long and thick, and a shorter cleft one; the claws of the

anterior and intermediate legs are double and each one equally deeply cleft."

### Gen. HETEROCHELUS, Burm.,

Handb. d. Entomol., iv., 1, p. 87.

*Ischnochelus*, Burm., *loc. cit.*, p. 129.

Mentum and palpi as in *Dichelus;* lobe of maxillæ strongly dentate inwardly and having at the tip a small pencil of hairs which is often wanting, or is quite rudimentary, the number of teeth varies from seven to five, if the lobe is concave the teeth are strong, set opposite each other (*D. sulphureus*, *elegans*, &c.), if the lobe is not concave the number of teeth is reduced to five, set in a line (*coccineus*, *dissidens*, &c.), but in a few cases the lobe, although not concave, has seven ; the clypeus, which is slightly attenuate laterally, assumes three shapes : it is straight transversely at apex with the margin reflexed, and is more or less plainly quadri-dentate, and slightly angular laterally at the base (except in *H. egenus*), or more distinctly narrowed laterally and tri-dentate, in which case the lateral basal angle is more distinctly toothed, or again bi-dentate, but then the lateral angle has become as conspicuous a tooth as the median one, which, however, projects much more (*H. dissidens*, *vittiger*, *controversus*) ; the prothorax is similar to that of *Dichelus*, and not always grooved longitudinally in the posterior half, it is, like the head, very scabrose or scabroso-punctate, and never glabrous; the scutellum is of moderate size, sub-ogival but rounded at the tip ; the elytra are slightly convex or nearly plane, covered entirely with round or elongate scales, or with appressed hairs, or they have bands of scales, deeply and irregularly punctured and always more rugose on the sides, costulate, or having on each side two longitudinal impressions generally filled with scales or a very short erect pubescence, laterally they are distinctly narrowed towards the apex from under the humeral part, and the sides of the dorsal abdominal segments are sometimes broadly uncovered ; the propygidium is always partly uncovered and usually fringed or banded with scales or squamose hairs similar to those clothing entirely the abdomen, or edging the ventral segments ; the pygidium in the male is usually plane, and declivous or sloping forwards in most of the species, but it is sometimes convex at the base (*gonager*), or very convex (*oreopygus*), or can project in an ovate form (*pygidialis*), and is either tomentose, covered with scales, glabrous, or pubescent ; in the female it is sub-horizontal ; the metasternum is very large, scaly or tomentose, and the abdomen is very compressed laterally in the male, and owing to the great development

of the pygidium, the segments are very compressed underneath and soldered, in the female the abdomen is convex; the anterior tibiæ are tri-dentate (*Heterochelus*) or quadri-dentate (*Ischnochelus*); in the first group the two basal teeth are either connate at the base or set very close to each other, at right angles to the tibia, very sharp, long, and almost always distinctly bending downwards, and the apical tooth is more oblique than the other two and assumes the same shape, there is occasionally a distinct angle above the basal tooth, and in *Ischnochelus* this angle has been developed into a tooth often nearly the same shape and size as the basal one, but in *I. bi-partitus* this tooth, although very distinct, is broader and more triangular than the one following, there is no inner spur in either sex; the claws of the fore legs are double, unequal, and the longer one is always cleft, that of the intermediate legs is in most cases double and both sides are cleft, but in several cases the smaller inner one has disappeared (*H. lugens*, &c.), those of the hind legs are either double with the inner claw always smaller than the outer, pressed against it, and cleft, the larger one being cleft or not, or single and simple, or cleft; the difference in the shape of the claws has no generic value whatever, but is very useful in discriminating between many species; the intermediate tibiæ have an apical spur, and the posterior ones have one or are without; when the mucronate part of the hind tibiæ of the male is very greatly developed, this spur disappears completely, but there are exceptions (*H. femoralis*, *unguiculatus*, *chiragricus*, *padagricus*, *insignis*, &c.); in the female this spur is always present; in the male the hind femora are very robust, or robust, seldom slender (*nubilus*, *dissidens*), in some species of the division *Ischnochelus* armed with a long spine on the trochanters or not, and sometimes with an inward tooth near the knee, the tibiæ are generally curved, hollowed underneath, carinate or compressed, in most cases serrate or dentate, strongly mucronate at apex or not, the articulation of the knee of the femur may be developed into an angular process turning sometimes into a spine, in this case the basal part of the tibiæ is more or less deeply emarginate or incised inwardly, and when it is scooped underneath, there is close to that emargination or semicircular impression, a more or less sharp tooth either on each side or on one side only. The female has a more modest livery than the male, the hind legs are simple or not unduly thickened; whenever they have scales these are more like squamose hairs, but there are some exceptions.

The genus, as now restricted, includes 94 species, 10 of which I have not been able to identify; of these one does probably not belong to the genus.

## *Key to the Species.*

### First Division.

Anterior tibiæ tri-dentate outwardly (Heterochelus).

A[3]. Clypeus straight at the tip, more or less sharply quadri-dentate.
B[2]. Elytra covered with contiguous scales.
C[2]. Hind tibiæ without an apical spur.
D[3]. Clypeus with the two median teeth hardly distinct.
E[2]. Elytra distinctly costate.
F[2]. Hind claws double, unequal.
*a*[4]. Pygidium clothed with a velvety black tomentum.

Hind tibiæ of the male not grooved underneath, but with the lower edge serrate, and the inner with a small tooth near the knee (pl. xlii., fig. 29) .. .. .. .. .. .. *vulpinus.*

Hind tibiæ moderately grooved underneath, but with both edges serrate and both strongly dentate on each side of the knee (pl. xlii., fig. 44) .. .. .. .. .. .. .. .. .. .. .. *sexlineatus.*

Hind femora with the inner claw of the femora near the knee greatly developed; hind tibiæ broadly laminate, sharply bi-dentate inwardly near the knee, and with the apical mucro long and transverse (pl. xlii., fig. 37) *natalensis.*

*a*[3]. Pygidium scaly but with two velvety black patches.

Hind tibiæ somewhat grooved underneath, but with the outer edges serrate and the inner one slightly dentate near the knee (pl. xlii., fig. 31) .. .. .. .. .. .. .. .. .. *multidentatus.*

Hind tibiæ broadly and deeply scooped underneath near the base, and strongly bi-dentate there, the inner spine being almost always truncate, inner mucro very robust, upper apical part produced into a distinct angular process (pl. xlii., fig. 30) .. .. .. .. .. *armipes.*

Hind tibiæ scooped underneath in the base only, triangularly dilated inwardly into a strong tooth at the apex of the excavation, and strongly serrate from there, upper apical part strongly developed .. .. .. .. .. .. *mimus.*

Hind tibiæ not scooped underneath near the base, but having there a distinctly truncate inner tooth, upper apical angle normal .. *concinnus.*

Hind tibiæ not scooped underneath, but having a conspicuous inner sub-median tooth, upper angle strongly developed .. .. .. *sulphureus.*

$a^2$. Pygidium uniformly clothed with scales of the same colour.

Hind tibiæ strongly dentate on each side near the knee, outer edge with a conspicuous, sub-median sharp spine .. .. .. .. .. .. *consanguineus.*

Hind tibiæ strongly dilated at apex and with a broad triangular inner tooth set close to the long, curved mucro .. .. .. .. .. .. *furoninus.*

$a^1$. Pygidium denuded, shining.

Hind femora with the inner tooth of the knee conspicuously developed; hind tibiæ with a sub-median, well-developed inner tooth, apices produced on each side into a long, curved mucro of equal length .. .. .. *consors*

$E^1$. Elytra non-costate.

$a^3$. Pygidium with two velvety dark brown patches.

Hind tibiæ scooped underneath at the base and having there a small tooth on each side of the groove, inner margin serrate .. .. .. .. *contractus.*

$a^2$. Pygidium entirely covered with scales of uniform colour.

Hind femora with an inner tooth near the knee; hind tibiæ with a sharp triangular inner tooth near that of the knee, outer edge strongly serrate, mucro long and curved, upper apical angle normal .. .. .. .. .. .. .. .. *ictericus.*

Hind femora with an inner tooth near the knee, hind tibiæ with a sharp triangular tooth near that of the knee in the inner margin, and a longer and more robust in the outer edge which is also strongly serrate from there to the apex the upper apical part of which is truncate (pl. xlii., fig. 43) .. .. .. .. .. .. .. .. *placatus.*

Hind femora with the trochanters produced into a long, laminate spine, obliquely truncate at the tip and dentate above the spine; hind tibiæ curved, grooved beneath, simple, and with a strong apical mucro bearing an apical spur .. *femoralis.*

$a^1$. Pygidium covered with a velvety dark brown tomentum.

Femora with a well-developed inner tooth near the knee; hind tibiæ moderately deeply grooved underneath in the base only, and slightly dentate there on each side, inner margin crenulate:

Pygidium entirely covered with a dark brown tomentum .. .. .. .. .. .. .. .. .. *gonager.*
Pygidium with the basal part only covered with a dark brown tomentum .. .. .. .. .. .. *citrinus.*

F[1]. Hind claws single, simple.
*a*[2]. Femora very long; hind tibiæ dilated, strongly emarginate inwardly near the base, grooved underneath.
*b*[4]. Trochanters conical at the base.
*c*[2]. Pygidium glabrous.

Elytra with four bands of greyish scales .. *parilis.*

Elytra clothed with closely set, but not contiguous, lanceolate greyish scales; legs red; pygidium very convex.. .. .. .. .. .. *murinus.*

Elytra clothed with closely set ovate scales; legs black; pygidium moderately convex .. *adspersus.*

*c*[1]. Pygidium glabrous in the lower part only.

Elytra clothed with contiguous ochreous scales (pl. xlii., fig. 35) .. .. .. .. .. .. .. *longipes.*

*a*[1]. Femora long, hind tibiæ differently shaped.
*b*[3]. Trochanters produced into a spine of moderate size.

Clypeus sharply 4-dentate; hind tibiæ deeply grooved underneath, with both edges denticulate .. .. .. .. .. .. .. .. .. *venustus.*

*b*[2]. Trochanters produced into a long spine.

Hind tibiæ compressed inwardly and sharply dentate on the median inner part, pygidium convex at the base, spine of trochanters vertical .. .. .. .. .. .. .. .. .. *vulpecula.*

Hind tibiæ very swollen inwardly at the base, excavate towards the apex, and with the two angles of the apex dentate; pygidium not convex, spine of trochanters horizontal and hamate at tip (pl. xlii., fig. 47).. .. .. .. *pachyglutus.*

*b*[1]. Trochanters not spinose.
*d*[2]. Pygidium completely covered with scales.

Hind femora not dentate inwardly near the knee; hind tibiæ obliquely emarginate underneath at the base, and then dilated, compressed, and having a median tooth in the centre of the inner face .. .. .. .. .. *aurantiacus.*

Hind femora with a strong, long, inner spine near the knee; hind tibiæ very broadly dilated at apex, concave there, and with the apical outer margin obliquely truncate above the mucro which is bifid (pl. xlii., fig. 45) .. *armatus.*

$d^1$. Pygidium without scales.

Hind tibiæ robust, very deeply and broadly scooped underneath, the edges sharply dentate on each side near the base, and the inner continued at the apex into a sub-transverse mucro, a short apical spur .. .. .. .. *bimaculatus.*

Hind femora with a small outer tooth near the knee; hind tibiæ compressed inwardly and with the lower edge sub-circularly incised above the short, apical mucro; pygidium very convex at the base, propygidium very broad .. *oreopygus.*

Hind femora simple; hind tibiæ with a slight inner tooth near the knee, and not mucronate at apex; pygidium projecting as an horizontal ovate process .. .. .. .. .. .. .. *pygidialis.*

$C^1$. Hind tibiæ with an apical spur.

$D^2$. Clypeus with the two median teeth as sharp as the lateral.

$a^2$. Hind claws single, simple.

$b^2$. Trochanters with a long spine.

Abdomen very broadly ampliated; spine of trochanters as long as the femora, subhorizontal and arcuate inwardly .. .. .. *hospes.*

$b^1$. Trochanters not spinose.

Elytra sub-costulate, covered with yellow scales, but having a juxta-sutural band and a discoidal one of lighter scales; pygidium with a median and two lateral bands of similar lighter scales; hind tibiæ a little dilated .. .. .. .. .. *sub-vittatus.*

Elytra costulate, juxta-sutural interval conspicuously deep, whole upper surface and pygidium clothed with minute, flavescent contiguous scales; hind tibiæ not dilated .. *egens.*

Elytra costulate, juxta-sutural interval not conspicuously deep, whole upper surface and pygidium clothed with minute, flavescent contiguous scales; hind tibiæ very little dilated *amœnulus.*

Prothorax and elytra covered with minute ochre-yellow scales, scales of pygidium concolorous; hind femora distinctly dilated; median teeth of clypeus not quite as much developed as the outer ones .. .. .. .. *sobrinus.*

$a^1$. Hind claws double.

Elytra covered with ochreous scales; femora very robust; hind tibiæ short, very broadly dilated outwardly into a sub-quadrate lamina, deeply hollowed underneath, and with the inner edge produced into a long median transverse tooth (pl. xlii., fig. 42) .. .. .. *coccineus.*

$D^1$. Clypeus quite straight and not dentate in the middle.

Hind claws simple.

Entirely covered with thick hair-like yellowish scales; hind legs simple; hind tibiæ not mucronate.. .. .. .. .. .. .. .. .. .. *egenus.*

$B^1$. Elytra clothed with hairs or bands of scales, but not with contiguous scales.

$C^2$. Hind tibiæ without an apical spur.

$D^2$. Hind claws double.

$a^2$. Clypeus with the two median teeth distinct.

$b^2$. Trochanters with a spine.

Prothorax dark metallic green, elytra chestnut; scutellum, pygidium, and abdomen clothed with yellow scales; hind tibiæ grooved underneath, dentate on each side of the base, and serrate or even dentate from there to the apex, apical mucro truncate at tip .. .. .. .. *viridicollis.*

$b^1$. Trochanters not spinose.

Black, elytra chestnut-brown; scutellum, propygidium, and abdomen clothed with yellow scales, elytra with a sutural and apical band of scales; pygidium glabrous; hind tibiæ short, curved, ampliate, grooved underneath and strongly dentate on each side of the base, but with the outer tooth further from the base than the inner, and the inner mucro long and curved:

Prothorax not grooved, closely scabroso-punctate .. .. .. .. .. .. .. .. *promontorii.*
Prothorax grooved, and with scattered non-scabrose punctures .. .. .. .. .. .. *persimilis.*

$a^1$. Clypeus with the two median teeth indistinct. Trochanters spinose.

Entirely black; hind femora with a hamate inner tooth near the knee; hind tibiæ compressed, laminate and strongly bi-dentate underneath, and with the mucro produced in a third triangular tooth .. .. .. .. .. *tristis.*

D$^1$. Hind claws single.
$a^2$. Trochanters non-spinose.

Black, elytra and hind tibiæ red; prothorax with a median line of white scales, and a similar one on each elytron; scutellum, pygidial part, and abdomen clothed with dense white scales .. .. .. .. .. .. *bi-vittatus.*

Black, with the fore legs red and the elytra occasionally chestnut-red, the scutellum, a narrow ledge of the propygidium, and the abdomen scaly; elytra very roughly punctured; hind femora with the inner tooth of the knee well developed; hind tibiæ swollen on each side near the base, grooved underneath, equally dentate on each side, and having a hooked, robust, and sharp mucro (pl. xlii., fig. 38) .. *rufimanus.*

Black, with the elytra piceous brown, scutellum, apical margins of the elytra, propygidium, abdomen, and pygidium clothed with bright yellow scales; hind femora simple but with the two teeth of the knee greatly developed; hind tibiæ curved, compressed, semicircularly emarginate underneath from the base for half the length, then ampliated and ending in a curved mucro .. .. .. .. .. .. .. *bi-notatus.*

Black, with the fore legs reddish; clypeus emarginate at tip and not denticulate in the middle, scutellum and apical edge of elytra, of propygidium, and of abdominal segments narrowly scaly; hind femora with two very conspicuous teeth on each side of the knee and with the inner one produced into a curved spine; hind tibiæ arcuate, compressed, dilated towards the apex and with the lower edge sharply angular immediately above the curved, sharp and long mucro (pl. xlii., fig. 46) .. .. .. *forcipatus.*

$a^1$. Trochanters spinose.

Black, with the elytra light brown; clypeus very sharply quadri-dentate; elytra elongate, and with three bands of flavescent scales; hind femora with a tooth on each side at about two-thirds of the length; hind tibiæ dilated, compressed, lower margin deeply hacked and bi-dentate near the base; pygidium glabrous (pl. xlii., fig. 50) .. .. .. .. .. .. .. *elegans*.

Black, with the elytra testaceous and the legs reddish; head, prothorax, and pectus densely villose, pygidium scaly on the upper side, villose underneath; hind femora with a conspicuous inner tooth near the knee; hind tibiæ compressed inwardly, slightly grooved underneath, and dentate on each side of the groove, inner mucro long, distinctly curved (pl. xlii., fig. 41) .. .. .. .. .. .. .. .. .. *leoninus*.

Black, with the elytra very dark brown, elytra with two longitudinal bands of squamose hairs; pygidial part with golden-yellow scales; hind femora massive and having the trochanters produced into a long, horizontal spine reaching further than the knee, and armed with an inner apical tooth; hind tibiæ somewhat concave inwardly, armed with a strong, inner basal tooth and mucronate on each side at apex .. .. .. .. .. .. .. .. .. *mucronatus*.

C$^1$. Hind tibiæ with an apical spur.

$a^2$. Trochanters spinose.

Black, with the elytra light testaceous and the legs somewhat reddish; scutellum, pygidial part, and abdomen scaly; hind femora very massive; trochanters projecting as a spine in the median part of the thigh; hind tibiæ concave inwardly and with the lower edge emarginate at the base and nearly equally sub-mucronate on each side at apex *inornatus*.

$a^1$. Trochanters not spinose.

Clypeus sharply quadri-dentate, teeth equal.

Black, with the elytra testaceous red; scutellum, apical margin of elytra, pygidial part, and abdomen clothed with sub-lanuginose scales; hind femora robust, simple; hind tibiæ very deeply hollowed in the median part and having a small, median tooth on the upper margin .. .. .. .. .. .. .. *comosus*.

$b^2$. Clypeus with the two median teeth not quite as long as the outer, which are very sharp and set close to each other.

Black, with the elytra light testaceous, shining, and having a fuscous lateral band; hind margin of elytra, pygidial part, and abdomen scaly; hind femora and tibiæ simple, the latter a little swollen inwardly near the base, and slightly compressed towards the apex, where it is distinctly mucronate inwardly .. .. .. .. .. .. .. .. .. *senilis.*

Black, with the elytra dark brown, opaque; pygidium clothed with orange scales, but having two lateral darker spaces; hind femora robust, equally sub-dentate on each side of the knee; hind tibiæ as in the preceding species, but the apical mucro is shorter .. .. .. .. .. .. .. .. .. .. *analis.*

Black, elytra with three conspicuous bands of yellow scales, scutellum, pygidial part, and abdomen scaly; hind legs as in the preceding species (pl. xlii., fig. 33) .. .. .. .. .. .. *fraternus.*

$b^1$. Clypeus with the two median teeth hardly projecting.

$c^2$. Elytra non-costate.

Black, with the elytra dark chocolate-brown; prothorax and pectus villose; scutellum, apical margin of elytra, pygidial part, and abdomen with flavescent scales; hind femora simple, hind tibiæ concave inwardly, not mucronate at apex (pl. xlii., fig. 36) .. .. .. .. .. .. .. .. .. .. *capicola.*

$c^1$. Elytra costate.

Black, elytra tri-costate, intervals with fulvous scales, pygidium scaly and with two fuscous patches; femora and tibiæ simple, the latter angular at apex .. .. .. .. .. .. .. .. *bisignatus.*

Black, shining, with the legs reddish; elytra with the intervals filled with bands of squamose hairs turning to scales in the posterior margin; scutellum, pygidium, and abdomen scaly, hind legs simple, posterior tibiæ compressed on each side, gradually ampliate, not mucronate at apex .. .. .. .. *minutus.*

$A^2$. Clypeus sharply tri-dentate at tip.

$B^2$. Joints of hind tarsi triangular and compressed.

$a^2$. Hind tibiæ without apical spur.

Body without scales; hind femora with two spines set longitudinally; hind tibiæ greatly dilated towards the apex, bi-dentate on each side, and strongly mucronate, joints of hind tibiæ strongly dilated outwardly (pl. xlii., fig. 20).. .. .. .. .. .. .. .. .. *detritus.*

$a^1$. Hind tibiæ with an apical spur.
$b^2$. Tooth under the femur nearly apical, broad and short.

Elytra without scales, hairy, hind tibiæ very short, mucronate part strongly curved (pl. xlii., fig. 22) .. *unguiculatus.*

$b^1$. Tooth under the femur sub-median, long and sharp.

Elytra covered with flavescent scales and having an elongate velvety brown patch on each side of the posterior part (pl. xlii., fig. 21) .. .. .. .. .. *podagricus.*

Elytra having a broad sutural band and a narrower marginal one of yellowish scales (pl. xlii., fig. 19) .. *chiragricus.*

$B^1$. Joints of hind tarsi not compressed.

$C^2$. Elytra clothed with contiguous scales.

Prothorax with squamulose, sub-appressed hairs; elytra clothed with contiguous flavescent scales; pygidium scaly; hind femora with a strong spine on the trochanters; hind tibiæ grooved, distinctly dentate outwardly on each side of the base, and sharply mucronate at the apex .. .. .. .. .. .. .. *optivus.*

$C^1$. Elytra with bands of scales, or clothed with appressed hairs.

$D^2$. Hind tibiæ without apical spur.
$a^2$. Trochanters sharply spinose:

Elytra chestnut-brown, and with a few scales along the suture; pygidium scaly, hind femora robust, simple; hind tibiæ compressed and connate underneath, briefly sub-dentate near the knee, and with the apical mucro long and curved .. .. .. .. .. .. .. .. .. *anomalus.*

Elytra chestnut-brown and having three more or less regular bands of yellow scales; pygidium scaly; hind femora with a conspicuous inner tooth near the knee; hind tibiæ a little swollen in the basal part, where it is grooved underneath, and sharply dentate on the inner side, mucro long, arcuate and somewhat slender (pl. xlii., fig. 40) .. .. .. .. .. .. *miserabilis.*

Elytra black, covered with greyish appressed hairs, scutellum and pygidium covered with yellow scales; hind femora moderately robust, simple; tibiæ also simple, moderately ampliate, not mucronate at apex .. .. .. .. .. *estcourtianus.*

$a^1$. Trochanters not spinose.

Elytra fuscous-brown, very briefly pubescent, pygidium without any scales; hind femora very massive and simple; hind tibiæ very swollen in the middle and having a sharp, spine-like mucro on each side of the apex, hind tarsi very short, massive, fifth joint strongly dentate underneath (pl. xlii., fig. 34) *arthriticus.*

Elytra entirely covered with ochraceous appressed hairs, scutellum and pygidium densely scaly; hind femora moderately robust, hind tibiæ very swollen inwardly, simple, not mucronate at apex (pl. xlii., fig. 39) .. .. .. .. *ditus.*

D. Hind tibiæ with an apical spur.
$b^2$. Hind claw single, simple.

Elytra reddish brown, clothed with yellowish scales forming three bands on each side: pygidium without scales; hind femora simple, hind tibiæ more massive than the femora, very swollen in the middle, and with the apical part sharp but not mucronate; hind tarsi very short and massive, fifth joint bi-dentate underneath.. *insignis.*

Similar to the preceding species, but with the elytra black and without scales, and the hind femora less swollen .. .. .. .. .. .. *exactor.*

Elytra black, briefly pilose, apical margin with some yellow scales, pygidium without scales; hind femora with a conspicuous inner tooth near the knee; hind tibiæ broad, deeply scooped inwardly, and having a median triangular tooth on the inner margin of the excavation, apical mucro distinct, but not very long .. .. .. *pulverosus.*

Elytra dark chestnut-brown, and having a few scales along the hind part of the suture and on the outer margins; pygidium without scales; hind femora robust and with an inner tooth near the knee; hind tibiæ bi-carinate underneath, inner carina very bluntly toothed, apical part not mucronate .. .. .. .. .. .. *indigens.*

Elytra testaceous, briefly pilose, apical margins with some yellow scales; pygidium scaly; hind femora robust, simple, but with the outer part of the articulation of the knee sharply angular; hind tibiæ strongly emarginate near the knee, deeply scooped inwardly, bluntly dentate on the inner edge near the base, and nearly equally mucronate on each side at apex.. .. .. .. *connatus.*

Elytra piceous black, body without any scales, hind tibiæ a little ampliate, no apical mucro .. *incongruens.*

Elytra black, sub-costate, and having on each side two bands of greyish elongated scales; pygidium scaly but with two large round denuded patches; hind femora and tibiæ simple, slender .. .. .. .. .. .. .. *nubilus.*

$b^1$. Hind claws double.
$c^2$. Trochanters spinose.

Elytra chestnut-red and having three lines of round white scales on each side; pygidial part scaly; hind femora simple, hind tibiæ grooved, the groove sharply carinate and dentate on each side near the knee, inner mucro long, somewhat curved .. .. .. .. .. .. .. .. .. *fraudulentus.*

$c^1$. Trochanters not spinose.

Body red; elytra scaly but with a denuded patch on each side in the posterior part; hind femora angular near the knee; hind tibiæ hollowed and dentate on each side underneath near the base, apical mucro strong and curved.. *serripes.*

$A^1$. Clypeus bi-dentate in front and having a sharp lateral tooth.

$B^2$. Hind tibiæ with an apical spur.
$a^2$. Hind claw double.

Prothorax clothed with a black villose pubescence, scutellum, elytra, and abdomen covered with deep orange-red scales, pygidium without scales .. .. .. *dissidens.*

$a^1$. Hind claw simple.

Prothorax with a thick, dense, yellow pubescence, elytra, pygidial part, and abdomen covered with contiguous deep yellow scales; hind legs conspicuously villose outwardly only .. .. .. .. .. .. .. *controversus.*

$B^1$. Hind tibiæ without apical spur.

Prothorax with five bands of greyish squamose hairs, elytra with two bands of greyish scales .. .. .. .. *vittiferus.*

## Second Division.

Anterior tibiæ quadri-dentate outwardly (Ischnochelus).

$A^2$. Elytra bi-costulate on each side.

Intervals of elytra and posterior margin filled with round scales, pygidial part scaly in the male; basal tooth of anterior tibiæ as long as the other three; clypeus not dentate in the centre:

Prothorax with broad, scattered punctures .. .. .. *sulcatus.*
Prothorax closely and finely punctured .. .. .. .. *præstabilis.*

A¹. Elytra not costulate.

Black, elytra pale testaceous and without any scales along the suture, clypeus quadri-dentate .. .. .. .. .. .. .. .. *puerilis.*

Black, with the elytra pale testaceous and with a distinct broad band of scales along the suture, and also an outer one in the male:

Clypeus not dentate in the middle .. .. .. .. .. *timidus.*
Clypeus slightly bi-dentate in the middle.. .. .. .. *parentalis.*

Black, with a narrow basal band of yellow scales on the prothorax and the elytra, pygidial part and abdomen clothed with round yellow scales; clypeus quadri-dentate .. .. .. .. .. *bi-partitus.*

Black, with the elytra testaceous and clothed with appressed hairs; clypeus tri-dentate .. .. .. .. .. .. .. .. .. *pauperatus.*

Black, with the elytra pale testaceous in the anterior discoidal part and having a sutural band of yellow scales beginning at the middle and continued on the apical margins; clypeus bi-dentate and strongly reflexed .. .. .. .. .. .. .. .. .. .. *emeritus.*

## Heterochelus vulpinus, Burm.,

Plate XLII., fig. 29.

Handb. d. Entom., iv., 1, 1844, p. 93.

Male: Black, with the prothorax greenish bronze; elytra and legs occasionally reddish brown, scutellum clothed with yellow or flavescent scales; elytra with four longitudinal bands of scales of the same hue situated in the intervals and the two lateral ones coalescing a little past the median part; edge of propygidium clothed with yellow, round scales; pygidium with a velvety black coating, and a fine line of yellow scales at the apex, abdomen densely scaly; clypeus with the angles dentate and with two very little distinct median teeth; head and prothorax clothed with a dense flavous, or quite yellow villose pubescence; on the prothorax the median basal groove is very distinct; scutellum sub-ogival; elytra plainly attenuate laterally towards the apex, distinctly costate, and with the first two scaly intervals broader than the other two, the scales are nearly round, and set close to one another; hind legs greenish black; trochanters produced into a very long, horizontal spine, hind femora very swollen, dentate only on each side of the knee, with the inner tooth longer and more conspicuous than the outer; hind tibiæ also with a tooth on each side of the base, not deeply grooved longitudinally, slightly serrulate on each side of the shallow groove and with a long curved, compressed inner mucro, no apical spur, inner hind claw only half the size of the outer, and cleft.

Female: Clypeus as in the male, but a little more sharply dentate; prothorax equally villose; scutellum clothed with yellow scales; elytra also with four longitudinal bands of scales which are, however, lanceolate and hair-like; pygidium clothed with small yellow round scales, propygidium and abdomen with squamose flavescent, appressed hairs.

Length $6\frac{3}{4}$–$7\frac{1}{4}$ mm.; width 4–$4\frac{1}{2}$ mm.

*Hab.* Cape Colony (Port St. John), Natal (Durban).

### Heterochelus sex-lineatus, Thunb.,

Plate XLII., fig. 44.

Mém. Acad. St. Pétersb., 1818, vi., p. 443.

Male: This species is so closely allied to *H. vulpinus*, that it is sometimes difficult to differentiate the two. The shape, vestiture, and disposition of the scales are similar, the colour of the elytra and legs is often metallic black, the scales are often whitish, but the distinctive character consists in the presence of a distinct spinose tooth in the inner part of the knee, and of two distinct ones, facing each other at the basal part of the tibiæ, at the beginning of the grooved part.

Female similar to that of *H. vulpinus*.

Length 7–8 mm; width $3\frac{1}{2}$–$4\frac{3}{4}$ mm.

*Hab.* Cape Colony (Worcester, Riversdale, Caledon, George, Knysna, Port Elizabeth).

### Heterochelus natalensis, n. spec.,

Plate XLII., fig. 37.

Male: Black, with a faint metallic tinge on the prothorax; elytra chestnut-brown, and having on each side four bands of flavescent, round scales; scutellum scaly; pygidium covered with a black, subvelvety coating; clypeus with the angles dentate, but having almost no trace of median teeth; the head and prothorax are covered with villose flavescent hairs, and the latter has a narrow band of not very dense appressed squamose hairs; scutellum densely scaly; elytra distinctly costate, and with the intervals filled with dense, round scales; hind femora thick, and having beneath, at about the median part, a sub-vertical tooth, which is not connected with the trochanters, and a sub-transverse one close to the knee, the articulation of which is not dentate; the hind tibiæ are broadly laminate inwardly from a

very short distance from the curved base, the upper part of the laminate process is strongly and broadly bifid, and there is a very long transverse mucro, no apical spur; joints of hind tarsi elongate, very little compressed; inner claw not half the length of the outer, both slightly cleft.

Female unknown.

Length 6–6½ mm.; width 3½–3¾ mm.

*Hab.* Natal (Estcourt, Durban).

### Heterochelus multidentatus, Burm.,

Plate XLII., fig. 31.

Handb. d. Entomol., iv., 1, p. 94.

Male: Greenish metallic black, palpi, antennæ, except the club, and the fore tarsi reddish; elytra with three bands of whitish or slightly flavescent scales on each side; head and prothorax closely scabroso-punctate and clothed with greyish and black erect villose hairs, along the base of the prothorax are a few whitish grey, remote, squamose appressed hairs; the clypeus is not emarginate in the middle at the tip; scutellum clothed with greyish scales; elytra bi-costate on each side, with the three spaces intervening between the suture and the two costæ filled with a band of dense, ovate whitish scales, the juxta-sutural band is the longest and goes round the apical margin in some examples, the discoidal one is obliterated past the middle and the outer one is oblique and hardly reaches the apex of the discoidal one, or is entirely absent, the surface is roughly punctured, and the sides are clothed with a short but dense greyish pubescence; propygidium, pygidium, and abdomen covered with contiguous yellowish scales which are occasionally deep orange at the base, and being slightly less dense there form with the background two darker patches separated by a fine line of scales similar in colour to those of the lower part; hind femora very robust and having in the inner part of the knee a somewhat short spine; the spine of the trochanters is moderately long and sharp, the hind tibiæ are curved, not concave inwardly, but the lower edge is strongly serrate, and ends in a long mucro curved sub-obliquely, the upper apical part is sharply angular; inner claw of hind legs half the length of the outer.

Female unknown.

Length 6½–7½ mm.; width 3½–4½ mm.

*Hab.* Cape Colony (Worcester).

HETEROCHELUS ARMIPES, Bohem.,

Plate XLII., fig. 30.

Insect. Caffrar., ii., p. 154.

Male: Head and pectus black, prothorax æneous black, or reddish with a faint metallic tinge; elytra reddish testaceous, and having three distinct dorsal bands of yellowish or sub-flavescent scales, and an indistinct one along the outer margin; legs reddish; pygidium scaly and with a brown, velvety patch on each side of the base; clypeus sharply bi-dentate on each side at tip, and with two somewhat indistinct teeth in the middle; head granulose, pubescent; prothorax clothed with dense sub-villose flavescent erect hairs which are somewhat appressed along the basal margin; scutellum clothed with closely set elongate scales; elytra distinctly attenuate laterally towards the apex, costate, with the intervals filled on each side with a band of elongated flavescent scales turning sometimes to grey, the juxta-sutural band is broader than the other two, and the rounded costæ are briefly but densely setulose, the scales on the pygidium are deep yellow and very minute, and the two basal velvety patches are longitudinal and reach to half the length, the propygidium has a broad border of scales similar to those of the pygidium; the hind femora are large and have inwardly at the base a sharp median spine, this being really the apex of the trochanter which is quite fused with the femur, and an inner, strong, sub-hamate one set near the knee which is only slightly dentate on each side; the hind tibiæ are somewhat long, moderately scooped inwardly, and have a transverse graduated process on the upper edge, near the knee, and on the lower edge a strong triangular tooth situated a little lower down, the mucronate apical process is arcuate and sharp, the lower edge between the triangular tooth and the apical mucro is pluri-serrate, the upper edge is also denticulate in the posterior part and ends in a truncate projecting process, there is no apical spur, and the incised inner claw of the hind legs is half the length of the outer which is simple. In the small examples the truncate transverse process on the upper margin of the hind tibiæ is not strongly developed.

Female: The female has the head, thorax, and under side black; the teeth of the clypeus are similar; the elytra have also the scaly bands, and the pygidium has only a very faint trace of the two black patches, but is as scaly as in the male.

Length 6–8 mm.; width $3\frac{1}{2}$–$4\frac{1}{2}$ mm.

*Hab.* Natal (Durban, Estcourt); Transvaal (Johannesburg).

In the examples from Johannesburg, which are smaller than those

from Natal, the two black patches on the pygidium have spread over half the surface.

HETEROCHELUS MIMUS, n. spec.

Male: Very closely allied to *H. consanguineus;* the colour is the same but a little more metallic, and the scales are paler; the elytra are distinctly costate; the hind femora are similar, and the hind tibiæ also, but the pygidium which in *D. consanguineus* is entirely covered with scales has in the present species two brown basal patches.

Female unknown.

Length 5½–7 mm.; width 3–4 mm.

*Hab.* Natal (Durban, Frere).

HETEROCHELUS CONCINNUS, n. spec.

Male: Head only black, the body light testaceous red, the hind legs with a metallic tinge; it is closely allied to the preceding species, and is likewise clothed with yellow scales which are, however, a little paler; the vestiture of the head and prothorax is similar; the elytra are also costate with the costæ very briefly setulose, but the pygidium has two very distinct basal brown patches which are entirely absent in *H. mimus;* the hind femora are similar, but in the hind tibiæ there is below the knee a distinctly truncate tooth in the upper margin of the shallow groove, and none in the lower.

Female unknown.

Length 6½ mm.; width 3½ mm.

*Hab.* Transvaal (Potchefstroom).

HETEROCHELUS SULPHUREUS, Bohem.,
Insect. Caffrar., ii., p. 153.

Male: Very dark brown or fuscous and with a metallic tinge very noticeable on the hind legs; head and prothorax clothed with a very short, but dense yellowish-green pubescence; elytra entirely covered with yellowish-green scales; pygidium scaly and having two basal, brownish, velvety patches; clypeus very feebly dentate in the middle; the hairs covering the head and prothorax are very short and partly sub-appressed, but along the base of the prothorax there is a band of small scales; scutellum densely scaly; elytra distinctly costate; the whole surface is covered with small, round scales, but along the suture and on the costæ there is a double row of very short bristles; the propygidium and sides of the abdomen are clothed with greenish

yellow scales similar to those on the elytra; the pygidium is also scaly, but in the base of the latter there are two distinct dark brownish patches which nearly coalesce and reach to the median part; trochanters of hind legs very long and sharp, femora swollen and having a well-developed inner tooth at the knee, but none outwardly; the hind tibiæ are grooved beneath in the anterior part, and have a greatly developed triangular, sub-median inner tooth; the apical part is strongly mucronate sub-horizontally, and the inner margin between the tooth and the mucro is not serrate; inner claw of the hind legs only half the length of the outer.

Female: Much smaller than the male; elytra chestnut-brown, and having on each side four bands of yellowish lanceolate hairs; pygidium covered with yellowish scales, and having two basal, dark brown spots.

Length $6\frac{1}{2}$–8 mm.; width 4–$5\frac{3}{4}$ mm.

*Hab.* Natal (Durban), Cape Colony (Pondoland).

HETEROCHELUS CONSANGUINEUS, n. spec.

Male: Reddish brown with the clypeus black; closely allied to the preceding species, but the hairs and the scales are orange-yellow without any greenish tinge; the elytra are distinctly costate, the costæ are bristly and have no scales, while the intervals are thickly covered with them; the pygidium is entirely clothed with yellow scales, and has no dark brown patch; the trochanters and hind femora are alike, and the hind tibiæ are nearly similar, but the upper edge of the groove beneath is more strongly dentate at the base, and the inner median tooth is often bifid; inner claw of hind legs half the length of the outer which is simple. The hind legs very much resemble those of *H. placatus*.

In very fresh examples the costæ on the elytra are as much covered with scales as the intervals.

Female unknown.

Length $5\frac{3}{4}$–$6\frac{3}{4}$ mm.; width $3\frac{4}{5}$–$4\frac{1}{2}$ mm.

*Hab.* Cape Colony (Graham's Town).

HETEROCHELUS FURONINUS, Burm.,
Handb. d. Entomol., iv., 1, p. 98.

Male: Closely allied to *H. gonager*, but the colour of the background is redder brown, the head only being black; the squamose, lanciform hairs are not set very close to each other on the prothorax; the elytra are feebly costate, the costæ being set with short lanciform, squamose bristles, they are costate, but the costæ and the intervals

are filled with round scales a little lighter in the intervals; the pygidium is clothed with yellow-ochre scales; the hind femora are very thick, the trochanter is spinose and the inner tooth of the knee is conspicuous, the hind tibiæ are curved and crenulate beneath on each side, but have a strong ante-apical tooth; the inner claw of the hind legs is nearly as long as the outer, and is very deeply incised.

Female: The female is like the male in colour and shape; the median teeth of the clypeus are likewise almost obliterated; the shape of the claws is similar, but it is clothed with hairs instead of scales except on the posterior part of the elytra.

*Hab.* Cape Colony (? Graham's Town).

Length $5\frac{1}{4}$ mm.; width 3 mm.

HETEROCHELUS CONSORS, n. spec.

Male: Greenish black, shining; elytra with two interrupted bands of sub-flavescent scales on each side; size, shape, and vestiture of *H. multidentatus*, but the elytra are more rugose, while the two dorsal impressed intervals are deeper, and the pubescence more fulvous and longer; the pygidium is denuded, shining and impunctate; the clypeus has a median emargination between the two median teeth, and is not at all attenuate laterally; the juxta-sutural band on the elytra begins only in the median part, and also rounds the apex, the dorsal one reaches from the base to about the median part, and the supra-marginal one is obliterated; the hind femora are very robust and have a conspicuously long inner tooth close to the knee, the hind tibiæ are slightly dentate inwardly close to the knee on the upper margin, while the lower margin is conspicuously dentate at the base, the tibia itself is flattened inwardly, scarcely concave at the apex the two angles of which are produced into two long, but not very robust hooked mucros of equal size.

Female unknown.

Length $6\frac{1}{4}$ mm.; width $3\frac{4}{5}$ mm.

*Hab.* Cape Colony (Clanwilliam).

HETEROCHELUS CONTRACTUS, Bohem.,

Insect. Caffrar., ii., p. 156.

*H. pruinosus*, Boh., loc. cit., p. 157.

Male: Head black, prothorax and elytra fuscous or dark chestnut-brown, legs and under side reddish; prothorax and elytra clothed with contiguous, round, yellowish-green scales, the latter non-costate, and having on each side a diagonal band of whiter scales reaching

from the base to the median part of the disk, and another along the posterior part of the suture; pygidium with two basal brown patches; clypeus with the two median teeth nearly obliterated, the head is pubescent, and the prothorax has, besides the coating of green scales, a flavescent pubescence more distinct in the anterior part; the scutellum is clothed with slightly lanceolate scales which are of the same colour, that is to say, paler than those forming the two bands of the elytra; hind trochanters sharply spinose, hind thighs swollen and having a sharp tooth in the inner part of the knee, hind tibiæ deeply grooved beneath at the base and with the edges of the groove slightly dentate there, the inner edge being strongly serrate; they are strongly mucronate at tip, and are without an apical spur; inner claw of hind legs half the size of the outer, which is simple.

Female: The vestiture is like that of the male, but instead of having two brown patches on the pygidium, the scales on each side of the base are somewhat orange.

Length $4\frac{1}{2}$–6 mm.; width $2\frac{1}{2}$–$3\frac{1}{2}$ mm.

*Hab.* Natal (Durban, Estcourt).

This species might be taken for a small example of *H. sulphureus*, but the elytra are not costate, the hind tibiæ in the male have not the conspicuous median inner tooth, and the elytra of the female are uniformly covered with scales instead of having bands of squamiform hairs.

HETEROCHELUS ICTERICUS, n. spec.

Male: Black, with the elytra and legs rufescent; the latter are clothed with greenish-yellow scales; clypeus with the two median teeth small but distinct; head and prothorax clothed with flavous or yellow hairs; the latter has along the base a narrow band of elongate yellow scales, which fill also the posterior part of the median groove; scutellum densely scaly; elytra entirely clothed with contiguous round yellow scales, and having on each side two very feebly raised costæ having each a series of remote, somewhat squamulose, very short, whitish bristles; propygidium, pygidium and sides of abdomen clothed with closely set, round, yellow scales; hind femora with the trochanters long and spinose, and having the inner tooth of the knee well developed; hind tibiæ bent, scooped beneath at the base and having a small tooth near the knee on each side of the excavation, and close to it a strong, triangular tooth on the upper edge of the groove, while the lower edge is very strongly serrate as far as the strongly incurved apical mucro; no apical spur; inner claw of hind tarsi half the length of the outer, which is simple.

Female unknown.

Length 6 mm. ; width 4 mm.

*Hab.* Cape Colony (Mossel Bay).

This species is especially distinguished from *H. furoninus* by the absence of an inner tooth at the apex of the hind tibiæ.

### Heterochelus placatus, n. spec.,
### Plate XLII. fig. 43.

Male : Very closely allied to *H. ictericus ;* the shape, sculpture, and disposition of the scales and hairs are similar, but the scales are more yellow or even deep ochre, and the elytra are very slightly bi-costate, but the shape of the hind tibiæ is different ; the trochanters of the hind femora are long and sharp, and the tooth in the inner part of the knee is strong, but the hind tibiæ are only moderately deeply grooved at the base underneath, and feebly dentate near the knee, there is a stronger sub-basal tooth on the upper margin, and a strongly developed triangular one on the lower margin, at about the middle of the length, and the tibia is very little scooped from there to the apex ; the lower margin is moderately serrate, and the apical mucro is strong and curved ; no apical spur ; inner claw half the length of the outer which is simple.

Female : Black, with the elytra testaceous, clothed with appressed, not dense, flavescent hairs, and having a few round, yellow scales on the posterior edge of the elytra ; pygidium clothed with yellow scales.

Length $5\frac{1}{2}$–6 mm. ; width $2\frac{3}{4}$–$3\frac{3}{4}$ mm.

*Hab.* Natal (Durban).

### Heterochelus femoralis, n. spec.

Male : Black, with the elytra and legs brownish red ; elytra clothed with small, round yellow scales, scutellum and pygidium scaly ; clypeus very indistinctly bi-dentate in the centre, but with the angles sharp ; head and prothorax scabroso-punctate, clothed with partly appressed, partly erect flavous hairs, and having a more or less distinct basal band of elongate scales, which also fill partly the posterior part of the longitudinal median groove ; scutellum clothed with lanceolate scales ; elytra non-costate, having only a basal depression in the inner part of the humeral callus, and clothed with round scales ; propygidium and pygidium covered with very minute contiguous scales ; hind femora strongly ampliate and having beneath a long, somewhat thick, horizontal spine beginning at about the median part of the thigh, the spine being the prolongation of the trochanter which is fused with the thigh, at a short distance from

this spine there is a short tooth, and also another a little below the knee which is not dentate on either side; the hind tibiæ are very much curved, have a sharp inner tooth below the knee, are strongly mucronate at apex, and have a distinct apical spur; the inner hind claw is half the size of the outer and both are cleft.

This species is easily recognised by the great development of the hind femora, the horizontal spine of which reaches underneath as far as the knee; in the small development the trochanters are not as much fused with the thigh as in the large examples.

Female unknown.

Length 5–6½ mm.; width 3–3½ mm.

*Hab.* Transvaal (Potchefstroom).

HETEROCHELUS GONAGER, Fabric.,

Spec. Insect., i., p. 45.

Oliv., Entom., i., p. 74, pl. vi., fig. 68.

Male: Head, prothorax and pectus fuscous; antennæ, legs, and elytra rufescent, the latter is covered with contiguous yellow scales but the whole of the pygidium has a black, velvety coating; clypeus with the two median teeth very little distinct; prothorax covered with a very short, dense pubescence, partly appressed, and some slightly elongate yellow scales; scutellum scaly; elytra slightly bicostate on each side, the two costæ unite at the apex in a distinct callus, and are very briefly setigerous, the whole surface is covered with small, contiguous scales; edge of the propygidium and sides of abdomen covered with yellow scales a little paler than those on the upper surface; trochanters of hind legs very long and sharp, hind thighs with a well-developed tooth close to the inner part of the knee which is not dentate outwardly, hind tibiæ moderately curved, grooved beneath, with a very small tooth on each side of the basal part of the groove and with both edges distinctly serrate, mucro curved, sharp but short, no apical spur; inner claw of hind legs not half the length of the outer, and not cleft.

Female unknown with certainty.

Length 5½–6 mm.; width 3–3¼ mm.

*Hab.* Cape Colony (Graham's Town).

HETEROCHELUS CITRINUS, Burm.,

Handb. d. Entomol., iv., 1, p. 98.

Male: Very closely allied to the preceding species, but the colour is dark brown, and the scales have a more greenish tinge; the

pygidium is black from the base to the median part and covered with scales from there to the apex; the hind femora are similar, but the hind tibiæ are thicker at the base, and the mucro is more developed; the inner claw of the hind legs is about half the length of the other and is distinctly cleft.

Length 5½ mm.; width 3 mm.

*Hab.* Cape Colony (no exact locality).

HETEROCHELUS PARILIS, n. spec.

Male: Black, with the anterior legs, and also the antennæ, with the exception of the club, reddish; scutellum densely scaly; elytra with three dorsal bands of greyish scales reaching to the apex and a somewhat indistinct marginal one on each side; pygidium nude, shining; clypeus not visibly dentate in the middle, but with the angles sharp and acute; head granulose, clothed with a greyish pubescence; prothorax slightly scabroso-punctate and having the median posterior groove very distinct, clothed with long, not very dense, greyish-black erect hairs interspersed with a few greyish scales which form a distinct basal band; scutellum somewhat sharp at tip; elytra not much ampliated laterally in the anterior part and narrowed towards the apex, costate and with the three intervals filled with small, round, greyish scales, which form also a band along the apex; propygidium with a broad border of similar scales, which are also to be found on the sides of the abdomen; hind femora strong but not very swollen; the trochanters are developed into a very short, triangular tooth, and at the apex of the femora the inner tooth of the knee is much more greatly developed than the outer, and is set more inwardly; the hind tibiæ are somewhat swollen but the edges are compressed, grooved beneath in the anterior part, they have a small basal tooth, and the angle of the inner wall of the groove is distinctly dentate close to the basal minor tooth, the apical mucro is long and sharp, and there is no apical spur; the hind claws are long, single and simple.

Female: Black, with the elytra pale testaceous, and the legs rufescent; the prothorax is hairy, not scaly; the scutellum is scaly, but not the elytra, and the pygidium and sides of the abdomen are clothed with small flavescent scales.

Length 5–6 mm.; width 3–4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Worcester), ? Natal (Durban).

HETEROCHELUS LONGIPES, Burm.,
Plate XLII., fig. 35.
Handb. d. Entom., iv., 1, p. 101.

*H. testaceipennis* ♀, Blanch., Catal. Coll. Entom., p. 65.
*H. gonager*, Guér., Icon. Régn. Anim. Insectes, pl. xxiv., fig. 3.

Male: Black, with the legs red and the hind tarsi sometimes piceous red; clypeus quadri-dentate but with the median tooth shorter than the outer ones, and not very sharp; head covered with a very short, erect flavescent pubescence; prothorax distinctly grooved longitudinally in the posterior part and entirely covered with dense, although not quite contiguous, round flavescent scales and having a few squamose hairs on the anterior part; scutellum densely scaly; elytra elongate, distinctly attenuate laterally from near the humeral part to the apex, clothed with nearly contiguous round scales, and although not distinctly costulate, having on each side three faint series of remote greyish squamiform setæ, as well as one along the suture; propygidium and sides of abdomen clothed with small, yellow scales, pygidium not distinctly convex, and clothed with similar scales from the base to past the median part, thence denuded and shining; hind trochanters very slightly spinose, hind femora large and having the inner tooth of the knee sharper and more developed than the outer; hind tibiæ half the length of the thigh, not much arcuate, broad, compressed, grooved underneath and emarginate near the base, straight from there and having the basal part of the groove dentate on each side, and the apical mucro moderately long, nearly transverse, and very sharp; no apical spur, hind claw simple, single; intermediate tibiæ dilated and strongly compressed.

Female: Black, with the elytra light testaceous, and covered with appressed squamose flavescent hairs turning to scales along the extreme edge of the posterior part; scutellum, pygidium, propygidium and sides of abdomen clothed with yellow hairs.

Length 5¼–6 mm.; width 2½–3 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Worcester, Malmesbury, Port Elizabeth, Graham's Town).

HETEROCHELUS MURINUS, Burm.,
Handb. d. Entomol., iv., 1, p. 102.

*H. castaneipennis* ♀, Blanch., Catal. Coll. Entom., p. 66.

Male: This species is closely allied to *H. longipes;* it is also black and the legs red; the shape of the elytra and hind legs is similar, but instead of being flavescent or yellow, the scales covering the

prothorax, scutellum, elytra, propygidium, and sides of abdomen are greyish white or slightly flavescent; the scales on the elytra are very small, very elongate, somewhat in the shape of a squamose hair, and the whole pygidium, which is very strongly convex in the centre, is glabrous and shining black.

The female is like that of *H. longipes*, but the elytra are dark chestnut-brown.

Length 5–6 mm.; width $2\frac{1}{2}$–3 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury).

HETEROCHELUS ADSPERSUS, n. spec.

Male: This species is very closely allied to *H. murinus;* the shape, size, and sculpture are similar, but the scales with which the elytra are very abundantly sprinkled are rounder and broader, the hind legs are black, and the pygidium is much less convex in the male than in *H. murinus*, where it is conspicuously so. The females of the two species cannot be distinguished from each other.

Length 6 mm.; width $3\frac{1}{4}$–$3\frac{1}{2}$ mm.

*Hab.* Cape Colony (Clanwilliam).

HETEROCHELUS VULPECULA, Burm.,
Handb. d. Entomol., iv., 1, p. 102.

Male: Black, with the elytra and legs reddish; clypeus very slightly bi-dentate in the median part; head and prothorax covered with a short flavescent pubescence and small yellow scales; scutellum and elytra also covered with contiguous yellow scales; the elytra are not very elongate; the propygidium, the whole of the pygidium and the sides of the abdomen are covered with yellow scales; the pygidium is very convex at the base; the hind femora are very swollen, like those of *H. longipes* and *H. murinus*, but the trochanters are produced into a very long spine; the hind tibiæ are not deeply grooved underneath, and the inner edge of the groove has a sharp, median tooth, equi-distant from the apical curved mucro, and from the base; the outer margin of the groove is not well defined, and is not toothed; hind claw single, simple.

Length 5 mm.; width $2\frac{3}{4}$ mm.

Female not known with certainty.

*Hab.* Cape Colony (Port Elizabeth).

HETEROCHELUS VENUSTUS, n. spec.

Male: Black, but entirely covered on the upper side, pygidial area, abdomen, and sides of the metasternum with minute bright

yellow scales forming a nearly non-interrupted coating, legs reddish; head scabrose, hairy, clypeus very sharply quadri-dentate, median teeth as long as the outer and all distinctly reflexed; prothorax fringed along the anterior and lateral margins with long, flavescent bristles, and distinctly grooved longitudinally in the centre; elytra not distinctly costulate, attenuate laterally towards the apex; hind femora with a short trochanterine spine and more distinctly dentate inwardly at the knee than outwardly, hind tibiæ a little curved, deeply scooped underneath from base to apex, and having a short tooth near the knee at the base of the inner margin, both margins are serrate, and the mucro is a little slanting, but not very developed, no apical spur, hind claw single, simple.

Female unknown.

Length $5\frac{1}{2}$–$5\frac{3}{4}$ mm.; width 3 mm.

This species is easily recognised by its bright yellow coating and the four sharp teeth of the clypeus.

*Hab.* Cape Colony (Graham's Town, Port Elizabeth).

HETEROCHELUS PACHYGLUTUS, Wiedem.,
Plate XLII., fig. 47.
Zool. Mag., ii., 1, p. 97.

*M. hybridus*, Burm., loc. cit., p. 24.

Male: Black, with the prothorax and elytra clothed with yellow scales turning sometimes to orange on the elytra, but having there a sutural and a marginal band of paler scales; the pygidium is denuded at the apex only, and the rest of the surface is clothed with yellow scales, but it has a lateral orange patch on each side, and there is a transverse one of the same colour on the propygidium; the legs are reddish brown; the clypeus is feebly bi-dentate in the middle; the prothorax is nearly as densely scaly as the elytra, and the scales are nearly round; those on the scutellum are a little paler than on the elytra, but are of the same hue as those which are set along the suture; the hind femora are very thick and the trochanters are very long and project at about the median part of the thigh into a sharp horizontal spine distinctly bent inwardly at tip, the teeth on each side of the knee are distinct, but not much developed; the hind tibiæ are very swollen in the anterior part where the inner angle is developed into a tooth, scooped inwardly in the apical part where both the inner and outer angles are distinctly mucronate; no apical spur; hind claws single, simple.

Female: Black with the elytra chestnut-brown; prothorax hairy; elytra sparsely covered with appressed squamose greyish hairs, but

having a few scales along the posterior margin; scales on the propygidium, pygidium, and abdomen as in the male.

Length 4–4½ mm.; width 2¼ mm.

*H. hybridus*, Burm., which I have received from Graham's Town, is the same species as *H. pachyglutus*, but the trochanters of the hind legs are not quite so elongate, and the inner angular tooth of the base of the hind tibiæ is not very distinct.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury, Clanwilliam, Graham's Town).

HETEROCHELUS AURANTIACUS, Burm.,

Handb. d. Entomol., iv., 1, p. 104.

Male: Black, covered with light golden-yellow scales, legs red; clypeus with four teeth, the two median ones of which are very small; head briefly pubescent; prothorax clothed with yellow scales slightly more elongate than those on the scutellum and elytra, which are rounder and a little denser; the elytra are non-costate; the propygidium, pygidium, and sides of the abdomen are densely scaly, the scales being of the same colour as those on the elytra; the trochanters of the hind legs are almost non-spinose, the hind femora are swollen, and the teeth on each side of the knee are of equal size; the hind tibiæ are obliquely emarginate inwardly for some distance from the base, compressed, not grooved beneath, and have a nearly median short but sharp tooth in the inner face; there is no apical mucro or apical spur and the hind claws are single and simple.

Female: Elytra chestnut-red, partially squamose along the suture of the elytra.

Length 4 mm.; width 2¼ mm.

*Hab.* Cape Colony (Port Elizabeth).

HETEROCHELUS ARMATUS, Burm.,

Plate XLII., fig. 45.

Handb. d. Entomol., iv., 1, p. 107.

Male: Black, with the elytra and legs reddish; the head and prothorax are briefly but moderately densely pubescent, and have very few flavescent scales which can, however, be traced along the base; scutellum, elytra, propygidium, pygidium, and sides of the abdomen clothed with ochraceous-yellow, contiguous scales; clypeus quadri-dentate, but the two median teeth very small; elytra without costæ; hind femora thick, long and having at some distance from the knee a conspicuous spine curving somewhat downwards, the

outer tooth of the knee is strongly developed, and the trochanters are not spinose; the hind tibiæ are curved, dilated towards the apex, concave inwardly with the inner apical part obliquely truncate towards the mucro which is long, curved, and strongly bifid; no apical spur; hind claws single, simple.

Female: Elytra darker; sparsely clothed on the upper side with greyish hairs, which are more squamose on the elytra than on the prothorax; scales on pygidium and abdomen similar to those of the male.

Length 4–4½ mm.; width 2–2½ mm.

*Hab.* Cape Colony (Graham's Town, Port Elizabeth).

HETEROCHELUS BIMACULATUS, Burm.,
Handb. b. Entomol., iv., 1, p. 103.

Male: Black, with the elytra clothed with yellow scales but having on each side of the posterior part an oblique, elongate, subparallel black or dark brown patch; legs reddish brown; clypeus indistinctly bi-dentate in the median part; prothorax covered with lanciform yellow scales moderately dense but looking more like strongly squamiform hairs; scutellum densely scaly; the scales on the elytra, which are not costate, are small and very dense, and the postical brown patch reaches from the apical callosity to about one-fifth of the whole length; the propygidium and sides of the abdomen have yellow scales, but the pygidium is piceous red, and not scaly; the hind legs are robust, the trochanters are very briefly spinose, and the knees are briefly and equally dentate on each side; the hind tibiæ are broadly and somewhat deeply excavated underneath for nearly all the length, but the angle of the inner margin is more strongly dentate than the outer, and the mucro is much curved and long; hind claws simple, single.

Female: According to Burmeister, the female, which I have not been able to obtain, is sub-squamose, and the pygidium is clothed with squamiform scales.

Length 5½ mm.; width 3 mm.

*Hab.* Cape Colony (exact locality unknown).

HETEROCHELUS OREOPYGUS, Burm.,
Handb. d. Entomol., iv., 1, p. 107.

Male: This species is closely allied to *H. armatus;* but it is a little smaller; the two median teeth of the clypeus are stronger and equal in height to the lateral ones; the vestiture and the disposition of the yellow scales are similar, but the pygidium is nude and shining,

strongly gibbose at the base and nearly horizontal; the trochanters are not spinose, the hind thighs are swollen and have a short but sharp spine underneath at a short distance from the knee, the two teeth of which are equal and not very distinct; the hind tibiæ are scooped underneath, although not deeply, for half the length, carinate from the median part to the apex, but the inner face is a little concave, and the upper inner edge has above the mucro, which is not greatly developed, a small tooth not projecting further than the mucro itself; no apical spur; hind claws simple, single.

Length 4 mm.; width $1\frac{4}{5}$ mm.

*Hab.* Cape Colony (Graham's Town, Somerset East).

HETEROCHELUS PYGIDIALIS, n. spec.

Male: Black, with the elytra light chocolate-brown, and sprinkled on the upper side with small, elongate whitish grey scales which are not contiguous but equi-distant and do not hide the colour of the integuments, while underneath the whole of the abdomen and the pectus are covered with contiguous longer scales, the edge of the propygidium has a very narrow band of similar scales, but the pygidium is quite smooth and impunctate, and projects horizontally in the shape of an ovate protuberance as long as the whole of the abdomen; the head and prothorax are scabroso-punctate, especially the former, the clypeus of which is slightly emarginate at the tip while the two median teeth are almost obliterated, in the median part of the prothorax the basal furrow is very distinct, and the anterior and lateral margins have a fringe of greyish not dense setæ; scutellum somewhat long and as scaly as the elytra; the latter are not costate, but they have two slight longitudinal impressions; the hind femora are moderately robust, simple, without any spine to the trochanters; the hind tibiæ are equally convex inwardly and outwardly in the basal part, but more compressed inwardly towards the apex, sub-carinate underneath and very slightly dentate inwardly at the top of the carina, near the knee, the inner apical part is sharply angular but not mucronate, and there is no apical spur; hind claws simple, single.

Female unknown.

This species is evidently allied to *H. oreopygus;* in which the pygidium affects also an ovoid shape, which is, however, restricted to the basal part only, whereas in *H. pygidialis* this development is quite symmetrical, and while in the first-named species the propygidium is very broad, it is greatly reduced in width in *H. pygidialis.*

Length $5\frac{1}{4}$–$5\frac{1}{2}$ mm.; width $2\frac{1}{2}$–$2\frac{3}{4}$ mm.

*Hab.* Cape Colony (Port Elizabeth).

HETEROCHELUS HOSPES, n. spec.

Male: Black, with the elytra covered with ochre-yellow or orange scales; prothorax non-scaly, pygidium and sides of abdomen clothed with orange-yellow scales; the body has a massive look on account of the very ampliated metasternum and abdomen; clypeus distinctly quadri-dentate, the four teeth being of equal height; prothorax clothed with sparse, decumbent, very short greyish hairs; scutellum densely scaly; elytra non-costate, but with the impression on each side of the humeral callus somewhat distinct, diagonally attenuate from near the shoulder to the apex, the scales are round and contiguous; hind femora thickened, trochanters produced into a long, falciform spine, curved inwardly but reaching as far as, or further than the knee, the inner tooth of which is slightly prominent; hind tibiæ nearly straight, a little attenuate inwardly at base, moderately thick for half the length, somewhat compressed inwardly from the median part to the apex which is not mucronate inwardly, and has a very distinct apical spur; hind claws simple, single.

Female: Like the male but with the elytra redder-brown and clothed with squamose hairs.

Length 4 mm.; width $2\frac{3}{4}$ mm.

*Hab.* Cape Colony (Stellenbosch, Tulbagh).

HETEROCHELUS SUB-VITTATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 99.

Black, with the prothorax clothed with squamose hairs turning to yellow scales in the posterior part, and in the basal, longitudinal groove; elytra covered with closely set round yellow scales which are paler along the suture and between the first and second slightly raised costæ; pygidium covered with yellow scales, but having two longitudinal orange bands; legs reddish; head sharply quadri-dentate, the teeth of equal height, but the two median ones set somewhat closer to one another than to the lateral ones; elytra not highly costate, but the costæ are nevertheless distinct; the scales on the propygidium are of the same orange colour as the two lateral bands on the pygidium; spine of the trochanters of the hind femora indistinct or projecting very slightly only, femora simple and very little dentate on each side of the knee; hind tibiæ simple, compressed inwardly towards the apical part which is only slightly mucronate inwardly and has a very distinct apical spur adjoining the mucro.

Female: Clypeus also sharply quadri-dentate; elytra with three

not very well-defined bands of hairs and paler elongate scales on each side; scales of pygidium as in the male.

Length $4\frac{1}{2}$–5 mm.; width $2\frac{3}{4}$–3 mm.

*Hab.* Cape Colony (Uitenhage).

### Heterochelus egens, n. spec.

Male: Black, covered with greyish scales having sometimes a slight flavescent tinge on the whole surface as well as on the pygidium and the sides of the abdomen; legs rufescent; clypeus sharply quadri-dentate, all the teeth equal, but not long; head and prothorax densely squamose, the scales being similar to those of the elytra, but not so closely set; scutellum scaly; elytra having between the suture and a distinct dorsal costa a depressed interval reaching from the base to the apex, but on the other side of the costa, the interval is only distinct from the base to the median part; hind femora moderately swollen and simple, trochanters non-spinose; hind tibiæ not curved, concave inwardly towards the apex which is slightly mucronate and has an apical spur; hind claws single, simple.

Female unknown.

Length 4–$4\frac{1}{4}$ mm.; width $2\frac{1}{4}$ mm.

*Hab.* Natal (Durban).

### Heterochelus amœnulus, n. spec.

Male: Very closely allied to *H. egens;* it is black with the legs rufescent, and the prothorax and elytra are covered with slightly elongate flavescent scales so closely set that the colour of the background is not visible; the whole pygidial part, the sides of the abdomen and also the hind femora are clothed with closely set scales which are light lemon-colour like those on the elytra; the elytra, however, have only a slight costa on each side, and the interval between the costa and the suture is shallow in comparison with that of *H. egens*, from which species it would be difficult to separate it but for this character; the shape of the clypeus and that of the hind legs are similar.

Female unknown.

Length 4–$4\frac{1}{2}$ mm.; width $2\frac{1}{4}$–$2\frac{1}{2}$ mm.

*Hab.* Cape Colony (Prieska).

### Heterochelus inops, n. spec.

Male: Black, with the elytra, the pygidium, and sides of abdomen clothed with pale, sub-flavescent scales; legs red; clypeus quadri-

dentate but with the two median teeth very small; prothorax clothed with a few appressed squamulose hairs and a few scales in the posterior part; scutellum covered with scales which are similar to those covering the elytra; hind femora moderately swollen and without spinose trochanters, angles of the knee distinctly rounded, hind tibiæ very little curved, flattened inwardly for a short distance from the base, slightly mucronate at apex, and having close to the mucro a very distinct apical spur; hind claws simple, single.

Female: Black, with the elytra dark chestnut-brown or testaceous red, and clothed with appressed, not dense hairs, and having at the apex a narrow band of flavescent scales; pygidium densely scaly.

Length 3–4 mm.; width 2–2½ mm.

*Hab.* Cape Colony (Graham's Town).

HETEROCHELUS COCCINEUS, Burm.,
Plate XLII., fig. 42.
Handb. d. Entomol., iv., 1, p. 106.

Black, with the scutellum, the elytra, the pygidium and the sides of the abdomen clothed with orange scales; clypeus sharply quadridentate, the four teeth equal; head and prothorax clothed with a not dense but somewhat long, greyish pubescence, but in the deep basal longitudinal groove of the prothorax there are a few orange scales; elytra non-costate; hind femora thick and with the trochanters non-spinose, deeply and broadly excavated underneath at apex, the knee being very strongly dentate on each side; hind femora very short, strongly dilated, very deeply and broadly excavated underneath, and the upper margin produced into a broad, somewhat triangular sharp tooth in the inner part near the knee, but the outer margin is straight, there is no mucro, and the apical spur is very distinct; hind claws double, the inner one is cleft and nearly three-quarters of the length of the outer which is simple.

Female: Black, with the elytra chestnut-brown, and covered with sub-appressed, flavescent hairs, but having only a few yellowish scales along the apical edge as well as on the scutellum; clypeus not strongly bi-dentate in the median part.

Length 4–6 mm.; width 2½–3¼ mm.

*Hab.* Cape Colony (Port Elizabeth).

HETEROCHELUS EGENUS, n. spec.

Male: Reddish brown, with the head dark fuscous, completely clothed with elongate, somewhat hair-like flavescent scales which

are as numerous on the prothorax as on the elytra or the pygidial part; the clypeus is quite straight, and on the clypeus and the frontal part there are three transverse rows of stiff, short bristles; the prothorax has no median impression, and the elytra are normally attenuate laterally and not costate; the pygidium is strongly directed forward and covered with concolorous hair-like scales, the hind femora are robust and simple, the hind tibiæ are also simple, somewhat gradually dilated towards the apex, compressed inwardly and not mucronate, the apical spur is distinct and the single hind claw is simple.

Female: Like the male, but the prothorax is more pubescent, and the scales on the elytra and pygidial part are more like sub-squamose hairs and are not so dense.

Length $4\frac{3}{4}$ mm.; width $3\frac{3}{4}$ mm.

*Hab.* Natal (Estcourt, Durban).

This species can easily be recognised by the straight apical part of the clypeus as well as by the thick and very elongate scales covering the body.

HETEROCHELUS VIRIDICOLLIS, Blanch.,

Catal. Collect. Entom., 1850, p. 63.

Male: Bronze-black, with the prothorax having a greenish tinge; elytra chestnut-red, scutellum, pygidial part and abdomen clothed with slightly flavescent scales; clypeus slightly di-dentate in the centre, head granulose; prothorax scabroso-punctate, clothed with a short and not very dense flavescent pubescence, and without any trace of scales, elytra narrowed laterally towards the apex, but not deeply emarginate below the humeral part, bi-costulate on each side, very rugosely punctulate, and clothed with a very fine appressed pubescence, hind femora with a short trochanterine spine and with the inner tooth of the knee more developed than the outer, hind tibiæ a little swollen inwardly at the base, and somewhat compressed towards the apex, sharply dentate on each side underneath at the base where it is grooved, serrate, or even toothed from there to the apex where it is sharply mucronate; intermediate and posterior inner claws half the length of the outer, and cleft, the outer posterior one is simple.

Female: Same colour as the male, but the elytra have on each side three or four bands of slightly flavescent appressed hairs which are denser on the rounded apical part.

Length 5–7 mm.; width 3–4 mm.

*Hab.* Cape Colony (Caledon, Riversdale, Stellenbosch, Paarl).

HETEROCHELUS PROMONTORII, n. spec.

Male: Black, with the elytra chestnut-red or dark bronze; the scutellum, the propygidium, and the abdomen are clothed with dense yellowish scales, but the pygidium is glabrous and shining, and the elytra have a sutural band of similar scales beginning at about the median part and continued on the apical, and a discoidal one reaching from the base to the middle; head and prothorax scabrose, very briefly pubescent and not scaly, clypeus dentate on each side but not denticulate in the centre; elytra distinctly bi-costulate on each side, second costa disappearing at about the median part, the intervening space is filled with the scales, which are not very dense on the discoidal one or along the outer margin; hind femora very robust, the trochanters are simple, but the inner tooth of the knee is developed into a distinct spine, the short hind tibiæ are curved, ampliated, grooved underneath and strongly dentate on each side of the base, but have the outer tooth set further from the base than the inner, the inner mucro is long and curved, almost hamate; claws as in *H. viridicollis*.

Female: Like the male, and also with the pygidium without scales and sub-glabrous; the scales on the elytra are replaced by sub-squamose hairs which are not conspicuous.

This species is not unlike *H. rufimanus*, which has also the denuded pygidium, but it differs in the sculpture of the elytra and in the shape of the hind tibiæ.

*Hab.* Cape Colony (Cape Town, Stellenbosch).

HETEROCHELUS TRISTIS, n. spec.

Male: Black, somewhat shining but clothed with a black pubescence, shorter on the elytra than on the prothorax where it is somewhat villose; pygidium very convex at the base and covered with a velvety black tomentum; head and prothorax closely scabroso-punctate, clypeus straight, angular on each side, but with the angles not reflexed; prothorax without scales; scutellum occasionally scaly, the scales flavescent; elytra very slightly bi-costulate on each side, closely and somewhat roughly punctured, covered with a fuscous pubescence but having in the juxta-sutural, and also on the discoidal intervals a few slightly flavescent sub-squamose hairs disposed obliquely; propygidium not distinctly scaly, but sides of the abdomen with distinct orange squamose hairs; hind femora robust, spine of trochanters fused with the thigh but projecting a little towards the median part, and at a short distance from it there is a sub-hamate, distinct spine; hind tibiæ compressed, having underneath a sub-

quadrate vertical lamina strongly bi-dentate and a horizontal, sharp apical mucro almost in a line with the two teeth; inner claw of hind tarsi not quite half the length of the outer, the latter is cleft.

Female unknown.

Length 6–6½ mm.; width 3½ mm.

*Hab.* Natal (Newcastle), Transvaal (Johannesburg).

### Heterochelus persimilis, n. spec.

Male: Very similar to *H. promontorii;* the hind femora and tibiæ have the same shape, but the body is a little more elongate, owing to the base of the elytra not being broader than that of the prothorax; the clypeus is not dentate laterally, the prothorax is distinctly grooved in the posterior part, the punctures are much more scattered, deeper and not scabrose; the elytra have on each side four narrow bands of white scales and are redder than in *H. promontorii* but the punctuation is the same; pygidium black, not scaly; scutellum densely scaly; legs black.

Female: Head and prothorax as in the male, and similarly sculptured; elytra and pygidium redder than in *H. promontorii* ♀.

Length 5 mm.; width 2½ mm.

*Hab.* Cape Colony (Willowmore).

### Heterochelus bi-vittatus, Burm.,
### Handb. d. Entomol., iv., 1, p. 114.

Male: Black, with the elytra and the hind legs shining red; prothorax villose and having a median longitudinal line of white scales; elytra with a discoidal line of similar scales; scutellum, abdomen and pygidium clothed with contiguous white scales, but the latter has a median longitudinal dénuded line which does not reach to the apex; clypeus sharply quadri-dentate, the teeth equal; head and prothorax very closely scabroso-punctate, the pubescence is very long and greyish and along the lateral and basal margins there is a narrow line of white scales; elytra elongate, attenuate towards the apex, but not deeply sinuate below the shoulder, they are cicatricose and roughly punctate, and have a narrow discoidal impressed interval filled with the white scales, but they are not costulate; the hind femora are only moderately robust and simple, the hind tibiæ are long, strongly swollen inwardly, sharply but briefly mucronate in the inner apical part, and quite similar to those of *H. ditus* (pl. xlii., fig. 39); apical joint of hind tarsi and claw very long. The shape of the hind tibiæ is nearly similar to that of *H. ditus* (pl. xlii., fig. 39).

Female : Like the male, but the elytra are more distinctly costulate, the median line on the prothorax and the discoidal one on the elytra are white as in the male, and so is the scutellum, but the scales on the abdomen and pygidium are yellow, and the latter has three elongate, dark patches, the median of which is more elongate than the others.

Length $7\frac{1}{2}$–$8\frac{1}{2}$ mm. ; width 4–$4\frac{3}{4}$ mm.

A very distinct species.

*Hab.* Cape Colony (Namaqualand).

HETEROCHELUS RUFIMANUS, Casteln.,

Plate XLII., fig. 38.

Hist. Natur., ii., p. 145.

*H. longulus*, Burm., Handb. d. Entom., iv., p. 114.

Male : Body black, with the fore legs reddish, or as often as not with the elytra chestnut-brown, or chestnut-red ; the elytra have a narrow apical margin of flavescent or yellow scales, the scutellum and abdomen are densely scaly, but the pygidium is glabrous and shining, and there is only a very narrow band of scales on the propygidium ; clypeus quadri-dentate, head and prothorax scabroso-punctate, clothed with long, villose greyish hairs, the median posterior groove of the prothorax somewhat deep ; elytra distinctly attenuate laterally towards the apex, densely but very briefly pubescent with the pubescence erect, hardly costulate and covered with deep, contiguous strongly scabrose punctures ; hind femora long, robust, and having the inner tooth of the knee somewhat strongly developed, hind tibiæ somewhat short, curved, grooved underneath, bi-dentate on each side at the base, and having an inner strongly developed somewhat arcuate mucro ; they are almost similar to those of *H. longipes* (pl. xlii., fig. 38).

Female : Like the male, but the elytra are covered with appressed, somewhat remote hairs, and have a few somewhat squamose ones along the suture.

Length 5–7 mm. ; width $2\frac{1}{2}$–$3\frac{1}{2}$ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury, Worcester, Ceres, Caledon).

HETEROCHELUS BINOTATUS, Thunb.,

Mém. Acad. St. Pétersb., 1818, vi., p. 448.

Male : Black, with the elytra piceous, fore legs reddish, scutellum, apical margin of elytra, abdomen, propygidium, and pygidium clothed

with golden-yellow scales; the latter has two sub-denuded, basal patches; clypeus quadri-dentate, the two median teeth a little smaller than the outer; head and prothorax closely scabroso-punctate, and covered with a comparatively short, sub-flavescent, erect pubescence, posterior median groove short but deep; elytra slightly costulate, slightly pubescent, the appressed pubescence somewhat seriate; hind femora very robust, simple but having the outer tooth of the knee very much more sharply developed than the inner which is also very distinct; hind tibiæ short, curved in the upper side, deeply emarginate underneath from the base for about half the length, sub-angular there, then ampliated, somewhat compressed, and produced into a strong, slightly curved mucro.

Female: Like the male, but the elytra are testaceous, and there is a sutural band of squamose hairs; the pygidium is entirely covered with flavescent scales, but there is on each side of the base an orange patch; the legs are reddish.

Length $3\frac{3}{4}$–5 mm.; width 2–$2\frac{1}{2}$ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl).

HETEROCHELUS FORCIPATUS, Burm.,

Plate XLI., fig. 46.

Handb. d. Entomol., iv., 1, p. 115.

*H. uncinatus*, Blanch., Cat. Coll. Ent., 1850, p. 65.

*H. dentifrons*, Blanch., loc. cit., p. 65.

Male: Black, with the fore legs reddish, elytra fuscous brown, covered with greyish appressed hairs and having a few minute greyish scales along the apical margin; the propygidium and the abdominal segments have narrow bands of similar scales, the pygidium is not scaly; head rugose, briefly pubescent, clypeus not dentate in the middle and deeply emarginate there, outer angles very sharp and reflexed; prothorax clothed with dark villose hairs; elytra hardly costulate, closely punctured, narrowed laterally towards the apex; hind femora very large and having on each side of the knee two greatly developed teeth the inner of which is longer, more curved and more spinose than the outer, the trochanters are not spinose, the hind tibiæ are very curved, compressed, dilated towards the tip and with the lower edge very deeply emarginate above the inner mucro which is compressed and bifid at the tip.

Female: Elytra light testaceous and not very hairy; pygidium clothed with scales and having on each side a darker patch.

Length $3\frac{1}{2}$–$4\frac{1}{2}$ mm.; width $2\frac{1}{2}$ mm.

*Hab.* Cape Colony (Cape Town, Tulbagh).

*H. dentifrons*, Blanch., is a variety with reddish elytra.

### Heterochelus simulans, n. spec.

Male: This species might be mistaken for *H. forcipatus;* the size and shape of the hind legs are the same, but the head is quadri-dentate and the outer teeth are not so developed nor so reflexed; the elytra are somewhat bi-costulate on each side and have three or four bands of orange-yellow nearly contiguous scales, and the propygidium, pygidium, and abdomen are clothed with similar scales, but the pygidium has two basal dark patches.

Female: Like that of *H. forcipatus.*

Length 3–4¼ mm.; width 2–2¼ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch).

### Heterochelus spurius, n. spec.,

Male: This species is still more closely allied to *H. forcipatus* than *H. mimus;* the elytra are covered with greyish, dense appressed hairs, like in *H. forcipatus*, but the clypeus is quadri-dentate and similar in shape to that of *H. mimus;* the pygidium has no scales, and the hind legs are similar to those of the two preceding species.

Female unknown.

Length 5 mm.; width 2½ mm.

*Hab.* Cape Colony (Caledon, Riversdale).

### Heterochelus elegans, n. spec.,
### Plate XLII., fig. 50.

Male: Black, with the elytra light testaceous, and the legs reddish, or occasionally black; prothorax with a median longitudinal band of yellowish scales and a less distinct outer marginal and basal one, elytra with three longitudinal bands of similar scales on each side, pygidium without scales, propygidium and abdomen scaly, upper edge of hind tibiæ fringed with long hairs, joints of hind tarsi fasciculate; head and prothorax very closely scabroso-punctate, clypeus quadri-dentate, the two median teeth very sharp, but smaller than the outer ones which are strongly developed; prothorax covered with a short black pubescence, fringed with short bristles laterally, deeply grooved longitudinally in the middle from base to apex, the groove filled with the yellow scales which are denser there than along the base or the lateral margins; scutellum scaly; elytra elongate, somewhat strongly attenuate laterally towards the apex but not very

deeply sinuate below the humeral part, hardly costulate but having on each side two discoidal and one lateral depression filled with very short, erect, blackish hairs, the three intervals are impunctate and scaly, the two discoidal bands are entire, but the outer one reaches from the base to the median part only; pygidium glabrous, shining; hind femora with the trochanters produced into a short but sharp spine, somewhat excavated under the knee, and dentate on each side of the excavation, the articulation of the knee is rounded on each side, hind tibiæ dilated, compressed, laminate underneath and having in the basal part three sharp, short teeth set in a line, apical mucro not much longer than the upper part of the apex which is somewhat truncate; hind claw single but slightly cleft inwardly.

Female unknown.

Length $6\frac{1}{4}$–$6\frac{1}{2}$ mm.; width 3 mm.

This pretty species has no ally. Owing to its more elongate facies it somewhat resembles a *Gymnoloma*.

### Heterochelus leoninus, n. spec.,
### Plate XLII., fig. 41.

Male: Black, with the elytra light fulvous and the legs reddish, but occasionally with the hind ones black, head, prothorax and the whole under side very densely villose, scutellum, propygidium, and abdomen clothed with yellow scales, pygidium scaly only on the upper half and villose on the lower, the elytra have in very fresh examples a band of yellow scales edging the suture on the posterior part, and extending along the apical margin; head and prothorax very scabrose, clypeus quadri-dentate, but with the two median teeth very small and the outer ones not very highly reflexed, the long and dense villosity clothing the head and prothorax is light fulvous; the elytra are very distinctly narrowed towards the apex, strongly sinuate below the shoulder, not costulate but distinctly impressed longitudinally close to the humeral callus, very closely punctulate all over and very briefly pubescent; hind femora robust, elongate, having a very short spine in the trochanter, and a strong inner one underneath close to the articulation of the knee, the hind tibiæ are compressed inwardly, slightly grooved underneath, dentate on each side of the groove, the inner tooth being the more developed of the two, and the inner mucro is long and curved; hind claw single, simple; the villose hairs on the pectus are white.

Female: Like the male, but the villose hairs on the upper and under side are whitish, the whole pygidial part is densely scaly and also villose.

Length 6–7½ mm.; width 3–4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Tulbagh).

HETEROCHELUS MUCRONATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 117.

Male: Totally black, somewhat shining; elytra with a juxta-sutural narrow and somewhat indistinct band of squamose greyish hairs, apical margin of elytra with a few golden-yellow scales, propygidium and abdominal segments with dense golden-yellow scales, pygidium also scaly but having a denuded, median longitudinal space, head and prothorax clothed with a dense, somewhat long, dark pubescence, clypeus sharply quadri-dentate but with the two median teeth a little smaller than the outer ones, and set close to one another; prothorax with a distinct, median furrow reaching from base to apex; scutellum hairy, without scales on the five examples which I have examined; elytra costulate with the three intervals on each side punctate and pubescent; hind legs robust, hairy, hind femora with the trochanters produced into a long horizontal spine reaching further than the knee, and between the basal part of this spine and the articulation of the knee there is a robust, sharp tooth, the hind tibiæ are broadly but not deeply scooped inwardly from base to apex, they have an inner tooth near the base and the apices are produced into two long, curved mucros of nearly the same length; hind claw single, simple, pectus and hind legs clothed with greyish villose hairs.

Female not known with certainty.

Length 5 mm.; width 3 mm.

*Hab.* Cape Colony (exact locality unknown).

HETEROCHELUS INORNATUS, n. spec.

Male: Black, with the elytra light testaceous and the legs reddish; scutellum, apical margin of the elytra, pygidial part and abdomen clothed with dense yellow scales intermixed along the edge of the propygidium and the abdomen with white scales forming there a narrow band or line; head very granulose, clypeus hardly quadri-dentate, the two median teeth being almost obliterated, it is covered with a flavescent, dense, moderately long pubescence, and the prothorax, which has a distinct median furrow reaching from the base to the middle only, is clothed with a similar pubescence, and bears no traces of scale; elytra distinctly attenuate laterally towards the apex, not costulate, covered with remotely scattered, appressed whitish hairs turning to denser, scale-like ones along the posterior part of the

suture, and occasionally along the outer margins; hind femora very robust, concave inwardly, the trochanter is fused with the thigh and projects as a sharp, long, slightly hooked spine at about the median part, the articulation of the knee is not dentate but is sharply angular in the outer part, hind tibiæ compressed inwardly, moderately dilated, not grooved, simple and ending at apex in two moderately long, nearly equal mucros, the outer of which bears a distinct apical spur; hind claw single, simple.

Female unknown.

Length 5–6½ mm.; width 3–3½ mm.

*Hab.* Cape Colony (Carnarvon).

HETEROCHELUS COMOSUS, n. spec.

Male: Black, with the elytra testaceous red, hind legs reddish brown; scutellum, pygidial part and abdomen, as well as the apical margin of the elytra covered with yellow scales somewhat lanuginose and resembling hairs on the propygidium and abdomen; head granulose, hairy, clypeus with four equal very distinct teeth; prothorax with a villose, sub-flavescent pubescence, and having a shallow groove in the middle in the posterior part of the disk; elytra very distinctly attenuate laterally towards the apex, strongly sinuate below the shoulders, and leaving a broad part of the upper side of the abdominal segments uncovered; hind legs robust, villose, hind femora simple and with the trochanters not spinose, but the outer part of the articulation of the knee is distinctly dentate, the hind tibiæ are dilated in the middle, have an inner, deep excavation with a triangular tooth above it on the upper margin and end in a curved, robust and sharp mucro bearing a very distinct apical spur, the upper part of the apex is also mucronate but the mucro is shorter; hind claw single, simple.

Female unknown.

Length 8 mm.; width 4 mm.

*Hab.* Cape Colony (exact locality unknown).

HETEROCHELUS SENILIS, n. spec.

Male: Black, with the elytra light testaceous but infuscate laterally, scutellum, apical margin of the elytra, pygidial part and abdomen clothed with yellowish scales, under side densely pubescent, clypeus quadri-dentate, but with the two median teeth not as much developed as the outer and set very close to each other; prothorax clothed as in the preceding species with a long greyish pubescence, and having a few appressed hairs of the same colour along the base;

elytra non-costulate, very shining, sprinkled with appressed, remote, flavescent hairs, and having along the posterior part of the suture, and round the apical margins a not very distinct band of yellow scales; pygidial part and abdomen villose; legs also villose, robust, hind femora simple, but with the outer part of the articulation of the knee dentate, the hind tibiæ are simple, thickened at the base, and slightly compressed in the inner part as far as the apex, where they are sub-mucronate on either side, the inner mucro bearing the apical spur, hind claw single, simple.

Female: Like the male, but the legs are reddish, and the scales on the elytra occur along the apical margin only; the median teeth of the clypeus are more obliterated than in the male.

Length 5–5¼ mm.; width 2⅖ mm.

*Hab.* Cape Colony (Worcester).

HETEROCHELUS CAPICOLA, Fabric.,
Plate XLII., fig. 36.
Spec. Insect., i., p. 46.
Oliv., Entom., i., 5, p. 76, pl. v., fig. 55 *a.b.*

Male: Black, with the elytra chocolate-brown; scutellum, abdomen, and propygidium clothed with dense flavescent scales, pygidium also scaly but having a triangular tomentose patch denuded of scales in the median part of the base; elytra covered with dense appressed greyish hairs; head very granulose, clothed with a dense erect pubescence, clypeus having only a slight sinuation in the middle, where the median teeth should be, outer angles very sharply dentate; prothorax clothed with a moderately long, very dense pubescence, scabroso-punctate all over and with a median furrow in the posterior part only; elytra conspicuously attenuate laterally towards the apex, not costulate, very closely punctured, in some examples the band of scales of the apical margins ascends a little along the suture; hind legs robust, villose, trochanters simple, hind femora also simple, and with the articulations of the knee rounded on each side, hind tibiæ simple, convex inwardly at the base, a little compressed towards the apex where it is sub-mucronate on each side, the apical spur is long, and the hind claw single and simple.

Female: The female is unknown to me, but Burmeister says that the elytra are testaceous and the legs fuscous, and that the clypeus is somewhat rounded, while the pygidium instead of being scaly is hairy.

Length 6–6½ mm.; width 3–3½ mm.

*Hab.* Cape Colony (Namaqualand).

### HETEROCHELUS FRATERNUS, n. spec.,
### Plate XLI., fig. 33.

Male: Very closely allied to *H. analis;* the shape, size, and hind legs of the male are also similar, but the vestiture is different; the clypeus is also quadri-dentate, but the two median teeth are distinctly smaller than the outer ones; the median groove of the prothorax and the base have a band of flavescent or golden-yellow scales; the scutellum is scaly; the elytra have two moderately raised, yet distinct costæ on each side, and four somewhat broad bands of rounded, dense, yellow or yellowish scales, the second band does not reach quite to the apex, and the fourth coalesces with the third at about half the length; the propygidium and sides of the abdomen are very densely scaly and so is the pygidium, the scales of which are, however, of a uniform tint.

Female: Densely hairy on the prothorax; elytra pale testaceous, clothed with dense greyish hairs, and having an apical band of yellow scales; pygidium and sides of abdomen covered with light orange-yellow scales.

Length $4\frac{3}{4}$–5 mm.; width $2\frac{1}{2}$–$3\frac{1}{4}$ mm.

*Hab.* Cape Colony (Caledon, Riversdale, Namaqualand).

In the examples from Namaqualand the scales are orange-yellow, but much paler in those from other localities.

### HETEROCHELUS ANALIS, Burm.,
### Handb. d. Entom., iv., 1, p. 116.

Male: Black, with the elytra chestnut-brown and the legs either dark brown or black; clypeus sharply quadri-dentate and with the two median teeth only slightly smaller than the outer; prothorax deeply grooved from the median part to the base, densely but somewhat briefly hairy, the hairs are slightly flavescent and there is no basal band of scales in my examples; scutellum clothed with appressed, squamose hairs; elytra covered with appressed, slightly flavescent and squamose hairs which do not hide the colour of the background, and having occasionally a narrow apical band of yellow scales; apical part of the propygidium and pygidium with contiguous golden-yellow scales, the latter with two darker yellow longitudinal patches; hind legs somewhat robust, trochanters non-spinose, hind femora simple, but with the knee somewhat sharply angular on each side; hind tibiæ simple, a little compressed inwardly towards the apex, and slightly concave there, sharply angular, almost submucronate on each side at tip, and with a distinct but short apical spur; hind claws simple, single.

Female : Elytra testaceous and with the suture sometimes black.
Length 4–4½ mm. ; width 2½–3¼ mm.
*Hab.* Cape Colony (Caledon, Riversdale).

HETEROCHELUS BISIGNATUS, Blanch.,
Catal. Coll. Entom. Mus. Par., p. 65.

Male : " Size of *H. binotatus* but a little larger, under side with white hairs, clypeus with four strongly prominent teeth, the two median ones being set close to each other ; prothorax punctate, setose, deeply sulcate behind in the centre ; scutellum clothed with yellow scales ; elytra plane, slightly tri-costate, with the intervals filled with fulvous scales, pygidium flavescent and having two fuscous patches ; legs piceous, posterior ones moderately inflated, femora simple, tibiæ not dentate, angular at apex.

Length hardly 5 mm."

The type has unfortunately lost its hind legs, but from the description given by Blanchard one can assume that it belongs to the group of *H. analis fraternus*, &c., and has an apical spur in the posterior tibiæ. The two fuscous patches on the pygidium are very noticeable.

*Hab.* Cape Colony.

HETEROCHELUS MINUTUS, Burm.,
Handb. d. Entomol., iv., 1, p. 130.

*Ischnochelus vittiger*, Blanch., Catal. Collect. Entom., p. 66.

Male : Black, shining ; head scabroso-punctate, very briefly pubescent ; prothorax closely scabroso-punctate, but with the punctures deeper and simple in the posterior part, clothed with short, sparse, sub-appressed slightly flavescent hairs, it is distinctly convex and the median groove is deep and disappears only at a short distance from the apical margin ; scutellum clothed with squamulose greyish-white hairs ; elytra a little attenuate laterally towards the apex, but not strongly sinuate below the humeral part, each one has two costæ on the disk, the inner one being the more distinct, and the humeral callus is also costate, the three intervals are more or less densely filled with appressed whitish or slightly flavescent hairs which are more numerous on the juxta-sutural interval, but which in the posterior part and along the apical margin turn into flavescent, somewhat rounded scales, in the fresh examples the lateral margin has also a line or narrow band of squamiform hairs, but these hairs are, as often as not, rubbed off, and the intervals are seen to be

deeply punctate; propygidium and pygidium clothed with dense, contiguous yellow scales somewhat deeper orange on the pygidium, abdominal segments clothed with somewhat lighter and more elongate scales; legs black with the tarsi piceous red, hind femora somewhat robust, simple, hind tibiæ somewhat compressed inwardly, gradually ampliated obliquely underneath, simple, and having a very long apical spur; the basal outer tooth of the anterior tibiæ is in both sexes angular instead of being as sharp as the other three.

Female: Like the male; the scales on the elytra and pygidium are similar, but those on the pygidial part are lighter, and the tibiæ are redder.

Length $3\frac{1}{2}$–4 mm.; width 2–$2\frac{1}{4}$ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Oudtshoorn, Clanwilliam, Uitenhage).

### Heterochelus detritus, Burm.,
### Plate XLII., fig. 20.
### Handb. d. Entomol., iv., 1, p. 89.

Male: Black, with the elytra sienna-brown and the hind legs, including the tarsi, reddish; anterior and intermediate legs piceous; head and prothorax finely and very densely scabrose and clothed with a short but erect pubescence, flavescent on the head, black on the disk, but turning to greyish above that part of the base which adjoins the scutellum, clypeus very sharply and strongly tri-dentate at tip, the teeth equal; prothorax very diagonally attenuate laterally in the anterior part, distinctly sinuate past the middle, and having on each side of the base a transverse, narrow impression with a sharp ledge; scutellum broadly rounded at tip and clothed with dense greyish hairs; elytra deeply sinuate laterally and strongly narrowed from there towards the apex, indistinctly multi-striate, and having, in addition to a single row along the suture, three duplicate series of very short, dark brown bristles; propygidium and pygidium glabrous, piceous brown; pectus and sides of abdomen slightly villose, the villose hairs greyish; hind femora very swollen with the trochanters non-spinose, and having a very distinct median and a supra-apical sharp tooth set in line on the under side; hind tibiæ triangularly dilated from the base, sharply pluri-dentate on the upper and having two distinct teeth on the inner edge, the apical part of which is produced into a long, slightly curved mucro; posterior tarsi laminate transversely outwardly; hind claws double, each one bifid, inner one half the length of the outer.

Female: The head, prothorax, scutellum and pectus are covered

with a sub-flavescent pubescence denser and longer than in the male; the clypeus is sharply tri-dentate, and the elytra and abdomen are very light testaceous; the hind legs are slightly rufescent, and the hind inner claw is much smaller than the outer.

Length 8½–10 mm.; width 5–5½ mm.

*Hab.* Cape Colony (Cape, Malmesbury, Namaqualand).

HETEROCHELUS UNGUICULATUS, Burm.,
Plate XLII., fig. 22.
Handb. d. Entom., iv., 1, p. 92.

Male: Black, with the elytra burnt sienna-brown, all the legs ferruginous red; clypeus short, very sharply and equally tri-dentate, head and prothorax closely and densely scabroso-punctate, and clothed with short, dense, greyish and brown sub-villose hairs; the prothorax is regularly ampliated and rounded laterally, and the transverse impression on each side of the basal margin has no carinate upper edge; scutellum much rounded at tip and clothed with short hairs similar in colour and density to the very short sub-erect ones which run along the suture; the elytra are clothed with appressed, very dense and not squamulose brown hairs, and they are not very sinuate laterally, very little attenuate behind, and cover the greatest part of the propygidium which, like the pygidium, is clothed with dense black, setulose hairs; the pectus is somewhat villose; the hind femora are very thick and broad, but short, and have past the middle a sharp, curved tooth which forms with the knee-spine a deep crescent, hind tibiæ short, curved, and having below the knee a triangular tooth, the apical mucronate inner part is produced into a very long and strongly curved tooth; joints of hind tibiæ compressed and with the four basal ones regularly triangular.

Female unknown.

This species, like the one preceding, has no ally.

Length 6½–7 mm.; width 4 mm.

*Hab.* Cape Colony (Stellenbosch, Paarl, Cape Town).

HETEROCHELUS PODAGRICUS, Fabric.,
Plate XLII., fig. 21.
Spec. Insect., i., p. 44.
Oliv., Entomol., i., 5, p. 73, pl. v., fig. 51.

Male: Black, elytra with a broad discoidal patch of slightly flavescent, small, contiguous scales extending over the greater part of the discoidal part, but bi-sinuate on each side past the median

part, and an apical band of similar scales ascending the posterior part of the outer margin; legs piceous, hind femora occasionally red; antennal joints, except the club, rufescent; clypeus with three sharp, equal teeth; head and prothorax scabroso-punctate and clothed with a short, erect, greyish-black pubescence; prothorax shaped as in *H. detritus*, but with the basal transverse impressions without a sharp ledge; scutellum briefly but densely pilose; elytra turning sometimes to dark chocolate-brown, very closely sub-scabroso-punctate, and with the space between the discoidal patch and the apical band clothed with a somewhat velvety fuscous tomentum; propygidium and pygidium without scales, glabrous; pectus and abdomen with a fine, short, greyish pubescence; hind femora with a sub-apical horizontal spine beneath, knees not dentate; hind tibiæ short, compressed, produced inwardly into a very long, curved process, and having near the knee a triangular tooth; the apical spur is situated at the base of the hooked inner process and is distinct; the four basal joints of elytra are regularly triangular and very compressed; inner claw more than half the length of the outer and both slightly cleft.

Female: The clypeus is similar to that of the male, and the legs and abdomen are more rufescent; the prothorax is clothed with longer hairs which are also more flavescent, and nearly the whole surface of the elytra is covered with flavescent scales except the humeral callus, and two discoidal longitudinal bands which are somewhat denuded.

Length 7–8 mm.; width 4–4½ mm.

*Hab.* Cape Colony (Riversdale, Knysna, Port Elizabeth, Humansdorp).

HETEROCHELUS CHIRAGRICUS, Thunb.,

Plate XLII., fig. 19.

Mém. Acad. St. Pétersb., vi., 1818, p. 439.

Male: Allied to the preceding species, and having likewise the clypeus sharply tri-dentate at tip; the shape, sculpture, and colour of the prothorax are similar, but the basal transverse impressions are a little deeper; the scutellum is non-scaly; the elytra are more attenuate laterally towards the apex, and they have a broad juxta-sutural band of yellow scales reaching from the base to the apex where it unites with a marginal one of nearly the same width; the propygidium and pygidium are glabrous; the hind femora are very large, sprinkled with numerous scar-like punctures, and are shaped as in *H. podagricus*, but the hind tibiæ are a little longer, less curved, less dilated inwardly at apex, with the apical process longer

and less broad at base, and besides the basal inner tooth near the knee, there is also an inner moderately raised carina somewhat dentate in the middle.

Female: I do not know the female of this species which, according to Burmeister, has only a few scales sprinkled on the elytra.

Length $9\frac{1}{2}$ mm.; width $6\frac{1}{4}$ mm.

*Hab.* Cape Colony (no exact locality).

### Heterochelus optivus, n. spec.

Male: Black, with the scutellum, elytra, pygidium, and sides of the abdomen covered with bright yellow scales, anterior legs rufescent; clypeus a little acuminate and very sharply tri-dentate at the apex, the three teeth being equal in size; head strongly scabrose; prothorax with a distinct longitudinal median impression reaching from the middle to the base, and having only a few squamose appressed yellow hairs which are greatly scattered; scales on the scutellum, elytra, and pygidial part very closely set; the elytra are not costulate; hind trochanters very sharply spinose, hind femora thick, simple but with the angles of the articulation of the knee sharp; hind tibiæ robust, but compressed at a short distance from the basal part and with the inferior edge slightly bi-emarginate and ending inwardly at apex in a conspicuous spine-like mucro, no apical spur; hind claws simple, single.

Female unknown.

Length $3\frac{3}{4}$ mm.; width 2 mm.

*Hab.* Cape Colony (Clanwilliam).

### Heterochelus anomalus, Burm., Handb. d. Entomol., iv., 1, p. 118.

Male: Black; head and prothorax with the normal sculpture and vestiture; scutellum with a few greyish scales; elytra dark chestnut-brown, distinctly ampliated laterally in the sub-humeral part, attenuate from there towards the apex, clothed with a very short, appressed greyish pubescence, and having along the suture a somewhat obliterated line of sub-flavescent hairs replaced by scales on the apical margins; pygidium and edges of abdominal segments covered with yellow, contiguous scales; hind femora robust, simple, but with the outer part of the articulation of the knee developed into a strongly angular tooth, the spine of the trochanters is long and sharp; the hind tibiæ are unicarinate underneath, the carina being prolonged into a long, curved mucro,

and close to the knee there is the customary inner tooth; hind claws single, simple, intermediate ones double, the outer deeply cleft.

Female unknown.

Length 5 mm.; width 3 mm.

*Hab.* Cape Colony (locality unknown). The only example of this species which I have seen is one collected by Drège.

HETEROCHELUS LUGENS, Burm.,
Handb. d. Entomol., iv., 1, p. 119.

*H. miserabilis*, Blanch., Catal. Coll. Entom., p. 66.

Black, with the elytra chestnut-brown or occasionally black, clypeus sharply tri-dentate; head and prothorax clothed with a short, erect, black pubescence, the prothorax is deeply grooved from the base to a short distance from the apex; scutellum covered with yellow ovate scales; elytra of the normal shape, faintly costulate on each side on the disk, closely punctured and having on each side three more or less obliterated bands of ovate yellow scales intermingled with a very short, sub-appressed, blackish pubescence; propygidium and abdomen edged with yellow scales and thick squamose hairs, pygidium deeply punctured and having a small squamose hair in each puncture; legs reddish, hind femora robust and having a very distinct inner tooth near the knee, the spine of the trochanters is long and sharp, hind tibiæ curved, swollen inwardly at the base, and then compressed from there to the apex where it is produced into a short but sharp mucro, and the inner edge of the excavated part underneath has a distinct tooth not produced inwardly; hind claws single, simple, intermediate one single, but cleft.

Female: Similar in colour to the male, the prothorax is more densely villose, and the hairs are lighter, the scales are replaced by squamose hairs which cover the scutellum and the pygidial area, and the elytra have only a sutural and a narrow outer marginal band of these hairs.

Length $4\frac{3}{4}$–$6\frac{1}{2}$ mm.; width $2\frac{3}{4}$–$3\frac{1}{2}$ mm.

*Hab.* Cape Colony (Ceres, Worcester).

*H. miserabilis*, Bl., is a red variety.

HETEROCHELUS ESCOURTIANUS, n. spec.

Male: Totally black, scutellum, pygidial part, abdomen and metasternum clothed with deep yellow scales; head and prothorax densely villose, the hairs greyish, clypeus broadly and sharply

tri-dentate, prothorax with a shallow median groove reaching from the median part to the base; elytra distinctly bi-striate and slightly bi-costulate on each side, coriaceous and clothed with a thick but very short appressed greyish pubescence; propygidium, abdomen, pectus and legs villose, the hairs flavescent; spine of trochanters small, but distinct, hind femora somewhat robust, simple; hind tibiæ also simple, moderately ampliate, somewhat concave inwardly at apex and not mucronate, hind claw robust, single, simple.

Female unknown.

Length 6½ mm.; width 3½ mm.

*Hab.* Natal (Estcourt).

HETEROCHELUS ARTHRITICUS, Fabr.,

Plate XLII., fig. 34.

Spec. Insect., i., p. 44.

Oliv., Ent., i., 5, p. 75, pl. v., fig. 44 *a.b.*

Male: Black, with the elytra fuscous brown; the scutellum is sparsely covered with greyish-white scales which narrowly edge the propygidium and the segments of the abdomen; pygidium without any scales; head and prothorax with the usual sculpture, and clothed with a dense, moderately short, black pubescence, clypeus sharply tri-dentate, prothorax with a short but deep basal furrow; elytra distinctly attenuate laterally towards the apex, clothed with a dense appressed dark pubescence, and very slightly costulate; hind femora robust and simple, trochanters without spine, hind tibiæ very swollen in the middle, and ending at apex in a spine-like mucro on each side, the lower one being a little longer than the upper, hind tarsi contracted, very massive and glabrous, the first four seem to be soldered and the second, third, and fourth are sharply angular inwardly, the fifth is longer than all the other four put together and has a conspicuous sub-bifid tooth underneath, the hind claw is very robust and very long, single and simple. The shape of the hind legs is similar to that of some species of *Pachycnema*.

Female: Black, with the elytra light testaceous; the pubescence on the prothorax is longer and lighter, the scales are more like squamose hairs on the propygidium and abdominal segments, and the pygidium is without scales and pubescent.

Length 4–6 mm.; width 2¼–3 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury).

### HETEROCHELUS DITUS, n. spec.,
### Plate XLII., fig. 39.

Male: Black, with the elytra ochraceous and completely covered with very dense and closely set, appressed, short squamose ochraceous hairs, scutellum, pygidial part and abdomen clothed with light yellow scales; head and prothorax densely villose, the hairs yellow, the clypeus is tri-dentate, and the prothorax has a short basal furrow filled with appressed hairs which form also a band along the whole margin; elytra elongate, bi-costate on each side, normally attenuate laterally towards the apex; legs villose, hind femora moderately robust, quite simple, trochanters not spinose, hind tibiæ very swollen inwardly in the middle, and not mucronate at apex, nor grooved underneath, the four basal joints of hind tarsi, short, triangular, fourth one more or less distinctly bifid inwardly, fifth longer than the four together, massive and conspicuously tri-dentate underneath, hind claw robust, simple, but not quite as long as the fifth joint.

Female: Shape and vestiture of the male, the elytra also are clothed with ochraceous appressed hairs, but they have each three bands of greyish ones reaching from base to apex, and on the pygidium are two apical patches of lighter scales.

Length 7–9 mm.; width $3\frac{1}{4}$–$4\frac{1}{2}$ mm.

The shape of the hind tibiæ of the male greatly resembles that of *H. bivittatus*.

*Hab.* Cape Colony (Paarl, Worcester).

### HETEROCHELUS INSIGNIS, n. spec.

Male: Black, with the elytra testaceous or reddish brown, often a little infuscate, and almost entirely covered with round not contiguous light yellow scales, or having three bands of scales on each side, these are often obliterated but there are nearly always traces of the juxta-sutural one left, legs reddish; clypeus sharply tri-dentate; prothorax covered with a short, erect black pubescence mixed occasionally with sub-villose flavescent hairs in fresh examples, in which case half the posterior part of the disk is covered with yellow or flavescent scales somewhat contiguous in the basal part, the median groove reaches only to the median part; scutellum scaly; elytra distinctly attenuate laterally towards the apex, bi-striate but not costulate on each side; propygidium and abdominal segments edged with yellowish or yellowish-whit scales; pygidium deeply punctured, but without scales; hind femora robust and simple, trochanters without spine, hind tibiæ

broader than the femora, very swollen on each side, and as broad at the compressed apical part as at the middle, sharply spinose on each side of the apex, but not mucronate, and having a distinct apical spur, hind tarsi contracted, very massive and glabrous, the fourth produced inwardly into a slightly bifid process, fifth longer than the whole of the four, very massive and very distinctly bi-dentate underneath, hind claw robust, simple. The shape of the hind legs is almost similar to that of *H. arthriticus*, but there is an apical spur wanting in the latter, and the fifth joint of the hind tarsi is distinctly bi-dentate instead of having one bifid tooth.

Female: The female is exactly like that of *H. arthriticus*.

Length 6–7¼ mm.; width 3–4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Malmesbury, Paarl, Worcester, Caledon).

### Heterochelus exactor, n. spec.

Very closely allied to *H. insignis*.

Male: Black, with only the abdomonial segments edged with flavescent scales, a few of which are also seen on the sides of the metasternum; the elytra are very dark fuscous brown, densely but very briefly pubescent, they have no trace of scales, and they are neither striate nor costulate; the hind femora are similarly shaped, but they are not quite as much swollen; the apical spur is identical.

This insect may prove to be a varietal form of *H. insignis*.

Length 6 mm.; width 3½ mm.

*Hab.* Cape Colony (Worcester).

### Heterochelus pulverosus, Burm., Handb. d. Entomol., iv., 1, p. 120.

Male: Black, elytra briefly pilose and having along the suture a somewhat interrupted band of yellow scales which borders also the apical margin, propygidium and sides of the abdomen clothed with yellow scales, pygidium denuded; clypeus distinctly but not very sharply tri-dentate; head and prothorax briefly pubescent, the pubescence black; elytra not costulate, but slightly impressed longitudinally along the suture and the humeral callus; hind femora robust, armed with a conspicuous inner tooth near the knee, trochanters with a very short spine; hind tibiæ broadly and deeply scooped inwardly and having a median triangular tooth in the inner margin of the excavated part, the outer margin is sinuate, at the apex there is a short but sharp mucro bearing an apical spur, hind claw single, simple, intermediate one double but with the outer one very small.

Female: I do not know the female, which, according to Burmeister, has the pygidium covered with greyish hairs.

Length 5¼ mm.; width 3¼ mm.

This species somewhat resembles *H. lugens;* the shape of the hind femora is the same, but the hind tibiæ are much more broadly scooped underneath, the inner tooth is set more in the middle, the mucro is shorter, there is an apical spur which is wanting in *H. lugens*, and the spine of the trochanters is much shorter.

*Hab.* Cape Colony (no exact locality).

HETEROCHELUS CONNATUS, Burm.,

Handb. d. Entomol., iv., 1, p. 123.

Male: Black, with the elytra light testaceous and infuscate laterally; scutellum, apical margin of the elytra, pygidial part and abdomen clothed with thick flavescent scales; head and prothorax covered with very dense sub-flavescent villose hairs, the clypeus is conspicuously tri-dentate, but the median tooth is blunter than the lateral ones; elytra not distinctly costulate, clothed with appressed not very closely set slightly flavescent hairs; pectus, abdomen, and legs villose, the latter are red; the hind femora are robust; the hind tibiæ are dilated, broadly excavated underneath near the base, the inner margin is bluntly dentate at a short distance from the knee, and the outer is distinctly emarginate at the base, they are mucronate on each side of the apex, the mucros are of nearly equal length, but not very long, and the inner one bears an apical spur.

Female unknown.

Length 6–7 mm.; width 3–3¼ mm.

*Hab.* Cape Colony (Oudtshoorn).

HETEROCHELUS INDIGENS, n. spec.

Male: Black, with the elytra and legs chocolate-brown, and the anterior legs redder; the facies and vestiture are similar to those of *H. pulverosus*, but it is much smaller, and the shape of the hind tibiæ is different; the spine of the trochanters is hardly discernible, the hind femora are moderately thickened, and have a sharp swelling inwardly, but they are not scooped underneath, and not at all mucronate at apex, the apical spur is small, but distinct; the claw of the intermediate legs is double, but the smaller one is extremely small; the hind claws are missing in the only example that I have seen.

Length 4 mm.; width 3 mm.

*Hab.* Cape Colony (exact locality not known).

### Heterochelus incongruens, n. spec.

Male: Black, without traces of scales, fore legs reddish; clypeus tri-dentate, but with the median tooth projecting more than the lateral ones which are more angular than dentate, head and prothorax very scabrose and clothed, especially the latter, with dense, moderately long villose black hairs; elytra of the normal shape, distinctly costulate on each side in the discoidal part, and clothed with a short but dense fuscous pubescence; pygidium very closely and somewhat roughly punctured, not pubescent or scaly, but fringed all round with long setæ, pectus pubescent, the pubescence of the metasternum greyish white; hind femora and hind tibiæ moderately robust and simple; the latter is not mucronate, and has a very distinct apical spur; intermediate claw double, but with the longer one not cleft; hind claw single, simple.

Female: Like the male, and recognisable only by the shape of the pygidium.

Length 4 mm.; width $2\frac{1}{4}$ mm.

*Hab.* Cape Colony (Worcester).

### Heterochelus nubilus, Burm.,

Handb. d. Entomol., iv., 1, p. 119.

Male: Black, with two bands of white scales on the elytra and the scutellum, propygidium and abdomen clothed with dense greyish-white scales; clypeus sharply tri-dentate, head and prothorax scarcely pubescent, the latter has a deep, post-median groove occasionally filled with white scales, and has a lateral and anterior fringe of setose hairs; elytra conspicuously attenuate laterally towards the apex, sub-costate on each side of the disk, and with the two longitudinal impressions, divided by the costule, filled with a band of small white round scales not very closely set; the outer band reaches to the median part only; legs with a few bristles, but otherwise glabrous, hind femora and tibiæ long, slender, the latter with a long apical spur; intermediate claw single but slightly cleft, hind one single, simple.

Female: Like the male, but the elytra are covered with denser and more elongate flavescent scales, and the pygidium is clothed with yellowish scales.

Length 4–5 mm.; width 2–$2\frac{1}{4}$ mm.

The species which I take to be *H. nubilus*, and which was labelled under this name in Drège's Collection, answers very well to Bur-

meister's description, but all my examples are smaller than the measurements given by this author.

*Hab.* Cape Colony (Worcester).

HETEROCHELUS FRAUDULENTUS, n. spec.

Male: Black, with the elytra and legs reddish brown, the scutellum, the pygidial part, the abdomen and the metasternum are clothed with contiguous flavescent scales, and the elytra have three narrow bands of similar ones; head sharply tri-dentate, but with the median tooth smaller than the lateral, head and prothorax clothed with a long, villose sub-flavescent pubescence; elytra distinctly attenuate laterally towards the apex but not sinuate below the humeral part; they are clothed with dense, greyish appressed hairs, the three bands consist of round scales situate in two very shallow longitudinal depressions, and the outer, which is the continuation of the apical marginal one, does not reach the humeral angle; legs reddish, with the hind ones piceous red; the hind femora are very robust, simple, but sharply angular on each side of the knee; the hind tibiæ are distinctly grooved underneath for the whole length, dentate on each side at the base and produced at apex into a long, somewhat curved mucro, bearing an apical spur; hind and intermediate claws double and both cleft; the inner claw is about half the length of the more robust one.

Female unknown.

Length 6 mm.; width $3\frac{1}{2}$ mm.

*Hab.* Cape Colony (Uniondale).

HETEROCHELUS SERRIPES, Blanch.,
Catal. Coll. Entom. Mus. Par., p. 62.

Male: Totally red, elytra covered with elongate, not very closely set, ashy scales, and have behind a fuscous patch on each side; clypeus tri-dentate, head and prothorax pubescent, the latter with a few squamose hairs along the base; elytra not much attenuated laterally towards the apex, and somewhat costulate; the hind legs are robust, there is no spine to the trochanter, but the femur is distinctly angular near the knee; the hind tibiæ are somewhat curved, slightly dentate on each side at the base underneath and strongly mucronate inwardly at apex, there is an apical spur; the propygidium, pygidium, and abdomen have elongate scales; hind claws double, and both cleft; the inner is more than half the length of the outer.

Female unknown.

Length 7 mm.; width 3½ mm.

The only example of this species which I have seen is one of Blanchard's type.

*Hab.* Cape Colony.

HETEROCHELUS VITTIFERUS, Burm.,
Handb. d. Entomol., iv., 1, p. 95.

Male: Black, prothorax with five longitudinal bands of ashy grey squamose hairs, elytra with two bands on each side of scales of the same colour, pygidial part and abdomen densely scaly; head pubescent, clypeus with the two median teeth separated by a very narrow space, and projecting obliquely beyond the two lateral ones; prothorax very rugose and with the area not covered by the five sub-squamose bands slightly pubescent; scutellum densely scaly; elytra narrow, elongate, moderately attenuate laterally towards the apex, having on each side two longitudinal impressions which are filled with the round, thick scales; legs somewhat slender, the hind femora and tibiæ are simple, the latter has a notch on the upper part, and is hardly mucronate inwardly; hind claws single, simple.

Female: Like the male, the vestiture is the same, but the scales are flavescent, the elytra have each three bands of scales, the juxta-sutural one being the broadest of the three, and in the apical part there is a distinct horizontal spine at a short distance from the sutural angle.

Length 4½ mm.; width 2 mm.

*Hab.* Cape Colony (exact locality unknown).

The female only is known to me. Burmeister says that next to the simple hind claw there is a very small, sometimes hardly discernible one. In my example this claw is simple.

HETEROCHELUS CONTROVERSUS, n. spec.

Male: Bronze, covered on the prothorax with a thick somewhat lanuginose golden yellow pubescence, and having thick contiguous scales of the same colour on the elytra, pygidial part, and abdomen; the legs are red, with a metallic tinge; the hind tibiæ are thickly and densely villose outwardly, the villose hairs golden-yellow; clypeus with the two anterior teeth somewhat broadly separated and projecting very obliquely beyond the lateral ones; the pubescence of the prothorax is very thick and moderately long, and forms a pile; the elytra have a very faint costule on each side, the pygi-

dium is very inflexed, the hind legs are moderately robust, the hind femora and tibiæ are simple, the latter are a little emarginate underneath near the knee, not mucronate at apex, and have a distinct apical spur; hind claw single, simple.

Female unknown.

Length 4 mm.; width 2 mm.

*Hab.* Cape Colony (no exact locality).

HETEROCHELUS DISSIDENS, n. spec.

Male: Black, with only the elytra and the scutellum covered with deep orange scales; head and prothorax very scabrose, and clothed with a short but dense, erect, black pubescence, clypeus acuminate and produced at apex into two sharp, triangular, reflexed teeth; prothorax with a median longitudinal furrow disappearing on the anterior part; scutellum covered with scales, which are brighter yellow than those on the elytra, where they are very small and set very close to each other, the suture, however, is without scales; the elytra are elongate, sub-parallel, not distinctly costate, and have on each side three longitudinal rows of very short, remote, black bristles, as well as a similar row along the suture; the propygidium, pygidium, sides of abdomen and legs are briefly and not densely setulose; the trochanters of the hind legs are non-spinose, the hind femora are not very swollen and are simple, even on each side of the knee, the hind tibiæ are nearly as long as the femora and also quite simple, gradually dilated from base to apex, not concave inwardly, strongly angular on each side of the apical part, but not mucronate, and there is a long, apical spur; hind claws double, the inner slender, cleft and only half the length of the other, which is very robust and simple.

Female: Clypeus also strongly bi-dentate, but not as sharply as in the male; the prothorax is clothed with longer grey hairs; the scales on the elytra are more lemon-colour, the two costæ on each side are quite distinct and usually denuded, and the pygidium and abdomen are hairy.

Length 6–7¼ mm.; width 3½–4 mm.

*Hab.* Cape Colony (Worcester).

The shape of the clypeus resembles a little that of *Mitrophorus ateuchoides*.

HETEROCHELUS (ISCHNOCHELUS) SULCATUS, Burm.,
Handb. d. Entomol., iv., 1, 1844, p. 129.

Allied to *Heterochelus minutus*, which it very much resembles; the colour and sculpture are identical, but the general facies is a little

more elongate, and instead of squamose appressed hairs the intervals on the elytra are filled with round bright yellow scales which form also a narrow band on the apical margin; the apical part of the propygidium and the pygidium are clothed with nearly contiguous, round, thick, yellow scales, while only the edges of the abdominal segments are scaly, and the scales are white; hind legs as in *Heterochelus minutus*, anterior tibiæ with the fourth basal tooth strongly developed.

Female unknown.

Length 4½–5 mm.; width 2–2¾ mm.

*Hab.* Cape Colony (Namaqualand).

### Heterochelus (Ischnochelus) præstabilis.

Male: Very closely allied to *H. sulcatus;* the shape is similar and also that of the anterior and posterior tibiæ; the elytra have also each a juxta-sutural band of yellow or yellowish scales beginning at a long distance from the base and rounding the apex, and another dorsal one reaching from the base to the median part of the disk, and the scutellum is also clothed with somewhat large, round scales, but the prothorax is very finely and very closely scabroso-punctate, and the median sulcus is less deep, especially in the anterior part.

Female: Black, with the elytra testaceous, but slightly infuscate at the base; the punctures on the prothorax are not so closely set as in the male, especially along the median groove, and on the elytra the two discoidal bands of scales are longer, and there is also an outer marginal one round reaching from the apex to humeral part.

Length 4½–5 mm.; width 2½ mm.

*Hab.* Cape Colony (Willowmore).

### Heterochelus (Ischnochelus) puerilis, n. spec.

Male: Black, with the elytra light testaceous, and the legs red; the elytra are covered with small, seriate, not closely set, very short appressed hairs, and only in the apical margin is there a narrow band of scales, but the scutellum, the pygidial part, and the abdomen are densely scaly; clypeus a little attenuate laterally, quadri-dentate, and with the lateral angular projection distinct; prothorax closely scabroso-punctate, clothed with a dense but short, erect greyish pubescence, and having in the posterior part a somewhat broad but very shallow longitudinal groove; elytra not costulate, not very sinuate laterally, and not much elongated; hind legs simple, hind tibiæ not very robust, very slightly ampliated underneath before

the median part, flattened inwardly and ending in a short mucro bearing the apical spur; hind claws single, simple; anterior tibiæ quadri-dentate, the basal tooth is shorter than the other three, and there are two or three serrate teeth above it.

Female: Like the male, but the scales on the pygidial part and abdomen are whiter.

This species is a little less elongated than the other species of this section, and is a good transition form.

Length 4 mm.; width $2\frac{1}{2}$ mm.

*Hab.* Cape Colony (Uitenhage).

HETEROCHELUS (ISCHNOCHELUS) TIMIDUS, Burm.,
Handb. d. Entomol., iv., 1, 1844, p. 130.

Male: Black, with the elytra light testaceous, but somewhat infuscate in the anterior part, legs rufescent; head very briefly pubescent, and very rugose, clypeus straight, sharply angular on each side but not denticulate in the centre; prothorax very closely scabroso-punctate almost all over, very briefly pubescent, but having along the base and also the outer margin a narrow band of slightly flavescent, appressed, sub-squamose hairs, and a few similar ones in the posterior part of the deep, median sulcus; scutellum densely scaly; elytra hardly distinctly costulate and having along the suture a broad band of somewhat closely set, ovate, flavescent scales which is continued round the apical part, and ascends along the outer margins to the humeral part, the space between this sutural and outer marginal band is filled with somewhat remote but similar scales which do not, however, form bands; the apical part of the propygidium and the pygidium are densely covered with thick, sub-lanuginose yellow scales, and the abdomen with elongate white ones resembling appressed hairs but thicker; hind tibiæ as in the preceding species, apical spur long.

Female: Like the male, but the elytra are a little less infuscate behind, and the scales are replaced by squamiform hairs.

Length 4–$4\frac{1}{4}$ mm.; width 2–$2\frac{1}{4}$ mm.

*Hab.* Cape Colony (Namaqualand).

HETEROCHELUS (ISCHNOCHELUS) PARENTALIS, n. spec.

Female: This species is very closely allied to *H. timidus*, and it might prove to be a large varietal form of the same. The male is unknown to me, but in the female the straight clypeus is bi-denticulate in the centre at apex; the sculpture and vestiture of the head and prothorax are the same, the elytra are redder but also slightly

infuscate behind, very rugose, and have similar appressed sub-squamiform hairs turning to yellow scales on the apical margin; propygidium and pygidium clothed with dense sub-lanuginose scales.

Length 6 mm.; width 3 mm.

*Hab.* Cape Colony (Carnarvon).

HETEROCHELUS (ISCHNOCHELUS) BIPARTITUS, Burm., Handb. d. Entomol., iv., 1, 1884, p. 130.

Male: Black, shining, elytra and scutellum clothed with dense, contiguous, ovate yellow scales, prothorax with a narrow but very distinct basal band of similar scales, edge of propygidium, pygidium, and abdomen densely scaly, the scales yellow, intermediate and hind legs reddish; head rugose, hardly pubescent, clypeus slightly narrowed laterally, slightly bi-dentate in the centre at the apex and with the outer angles strongly reflexed; prothorax nearly glabrous except for the narrow basal line of yellow scales which, in well-preserved examples, is continued on the outer margins, it is closely scabroso-punctate in the anterior part, but simply punctate towards the basal part, and the longitudinal median furrow is very deep; elytra not costulate, and entirely covered with the scales which are comparatively large; basal tooth of anterior tibiæ broad and triangular, but not as long as the one preceding it; hind tibiæ as in the other species.

Female: Like the male; the scales are similar and equally dense; the pygidium is more convex and this character is the only one that denotes the sex.

Length $5\frac{1}{4}$–6 mm.; width 3 mm.

*Hab.* Cape Colony (Namaqualand).

HETEROCHELUS (ISCHNOCHELUS) EMERITUS, n. spec.

Male: Black, shining, with the elytra having a basal light testaceous patch in the shape of a truncate cone reaching from each humeral angle to about the median part; legs reddish, head rugose not very briefly pubescent, clypeus slightly narrowed laterally and with the outer angles broadly and strongly reflexed and the anterior part emarginate; prothorax with the same sculpture as the preceding species but more densely pubescent, the pubescence being black and erect, there is no trace of scale or squamose hairs; scutellum partly clothed with whitish squamose appressed hairs; elytra elongate, narrowed laterally towards the apex, not costulate, punctured but

very shining, and having a sutural band of yellow, elongato-ovate scales beginning at about the median part, rounding the apex and ascending the outer margin for about one-fourth of the length; pro-pygidium, and pygidium, but not the abdomen, clothed with deep yellow scales; basal tooth of anterior tibiæ as long as the one preceding it; hind tibiæ as in the other species.

Female: Like the male, but the sutural and marginal bands of scales are more like appressed hairs.

Length $5\frac{1}{4}$–6 mm.; width 2–$2\frac{3}{4}$ mm.

*Hab.* Cape Colony (Riversdale, Worcester).

(*Species which I have not seen or been able to identify.*)

HETEROCHELUS AURICOLLIS, Burm.,
Handb. d Entomol., iv., 2, p. 477.

"Fuscous, head black, discoidal part of prothorax and legs rufous and with ochraceous hairs; elytra with four bands of scales; pygidium with two black patches at the base.

Length 3 lin. ♂.

From Caffraria. Form, size, and appearance of *H. vulpinus*, which is its nearest ally, but from which it differs in the following points: the margin of the head has two small median tubercles, the prothorax is light red like the legs, and its pubescence consists of broad, short reddish-yellow, scale-like hairs; the smooth costæ of the elytra bear stiff black bristles; the pygidium is reddish yellow with two black spots at the base; the hind tibiæ, but not the femora, have a thick tooth at the knee-joint, and several smaller teeth below this on the inner edge; the tarsi are more slender; the pubescence is shorter, coarser, more scale-like."

HETEROCHELUS BIDENTATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 107.

"Black, with the clypeus and the anterior tibiæ bi-dentate; posterior margin of the prothorax, scutellum, elytra, and abdomen clothed with fulvous scales.

Length 3 lin. ♂.

Black everywhere except on the basal part of the elytra, which are brown. Clypeus narrowed in the anterior part and bi-dentate at the apex, front and vertex of the head scabroso-punctate; anterior part of prothorax scabrose and having a longitudinal furrow, it is covered with long soft greyish hairs and has a basal border of small dull golden-yellow scales; similar scales cover also the scutellum but

they are not closely set there; the elytra and the pygidial part are clothed with similar scales; pectus with a greyish pubescence; legs brown and with greyish yellow hairs, anterior tibiæ with two sharp teeth, hind legs of the male long, not thickened and simple; all the claws are double, but the inner one is very small."

HETEROCHELUS LITURATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 96.

"Black, clothed with ashy hairs; legs and elytra red, the latter densely squamose and with fuscous bands; pygidium shining, sparsely squamose.

Length 3‴. ♂.

South Africa, communicated by Mr. Winthem. Head black, strongly punctured on the upper part, and covered with greyish hairs, clypeus tri-dentate, palpi yellowish red; anterior part of the prothorax clothed with greyish-yellow scales thickly mingled with villose hairs, the median sulcus is conspicuous, but not near the base; scutellum thickly scaly; elytra also scaly, but the scales on the costæ are small, greyish brown, and the costæ are bristling with hairs, these scales are disposed in three narrow rows on each side, the outer one ending in the centre, while the two inner ones broaden and merge into one from the median part to the apex; pygidium black or brown, shining and clothed with non-contiguous scales; propygidium densely scaly, sides of abdomen scaly; pectus hairy, episterna of mesosternum with lighter hairs, epimera of metasternum partly scaly and hairy; legs brown or reddish, sparsely bristly, posterior ones very thick in the male, especially the tibiæ, and the tarsi very short, tibiæ with a spur; hind claws single, simple."

HETEROCHELUS SENEX, Burm.,
Handb. d. Entomol., iv., 1, p. 123.

"Black, clothed with whitish hairs, elytra testaceous and covered with appressed hairs; pygidium flavous, clypeus quadri-dentate.

Length 3 lin. ♂.

From South Africa. A species well characterised by its broad and short corpulence, it is plane above, and the elytra are strongly attenuate laterally towards the apex, being thus very unlike all the preceding ones; head and body quite black, thickly scabroso-punctate and clothed with long greyish-white hairs, only on the tibiæ and on the buccal organs are the hairs golden-yellow; the clypeus is quadri-dentate, and there are also two more, one on each side of the base,

the antennæ are yellow; the anterior part of the prothorax has a very shallow longitudinal groove, the short scutellum is clothed with a few greyish hairs, the elytra are light testaceous, transparent, regularly punctured but with the punctures distant, each puncture bearing an appressed greyish hair, they are at the humeral part as broad as the under side, and they are thence attenuate, leaving the edge of the dorsal part of the abdominal segments uncovered, on the apical border they have a band of yellow scales, similar to those which clothe the pygidium where they are mixed with hairs; legs brown, thighs darker, clothed with long greyish hairs, the posterior tibiæ show distinctly to which sex the species belongs, in the male the hind tibiæ have on the upper side a tooth or hook pointing inwardly and set close to the knee, they are mucronate on each side at the apex, but the inner mucro is the longest, there is no apical spur; the tarsi are not long, and have a single, simple claw, but those of the intermediate ones are double."

HETEROCHELUS OCHRACEUS, Burm.,
Loc. cit., p. 100.

"Black, entirely covered with pale scales; elytra sub-costate and ferruginous red, legs of the same colour as the elytra; prothorax strongly convex.

Length 2½ lin.

Male: Squamose, hind femora and tibiæ simple underneath, anterior margin of clypeus distinctly dentate. Female: Pilose and squamose only on the abdomen, edge of clypeus obsoletely dentate.

South Africa.

This species has the compact facies of *H. subvittatus*, and differs from it, and also from *H. longipes* in having costate elytra. The apical part of the clypeus has four raised teeth, the two outer of which are united at the base by a part of the curved margin, the head is black, the pygidial part and the femora are clothed with light yellow hairs, the palpi and the antennæ are light reddish yellow with the exception of the club of the latter; prothorax more convex than in any other species, grooved longitudinally, clothed in the male with small light yellow scales denser behind, and with greyish hairs only in the female; the elytra are reddish brown with two slight costæ and covered with regular, thick, light yellow scales in the male, and with hairs only in the female; under side thickly hairy but with the posterior part scaly; pygidium of a uniform yellow and with long ciliæ along the base; legs reddish brown; in the male they are strong, the trochanters are not spinose, the hind femora have an

inner tooth at the knee, hind tibiæ curved, not toothed, hardly crenulate inwardly and mucronate at the apex, and without apical spur; hind claw single, simple, and robust."

HETEROCHELUS PACHYMERUS, Wiedem.,
Germ. Mag., iv., p. 140.
Burm., loc. cit., p. 106.

"Black, covered with greyish scales, clypeus quadri-dentate; prothorax most densely pilose; elytra and legs rufescent, the latter with greyish hairs.

Length $3\frac{1}{2}$ lin. ♂.

Received from Herr v. Winthem. The type of Wiedeman's description. One of the largest species, and on that account less like the series of the preceding species (*pachyglutus*, *hybridus*, *aurantiacus*, *sobrinus*, *bimaculatus*, &c.). Black, antennæ, palpi, legs, and elytra reddish brown; head and anterior part of prothorax thickly punctulate; apical margin of clypeus quadri-dentate, the two median teeth smaller than the lateral ones, the punctures bear each a short greyish-yellow hair recurved at tip, these hairs are not so dense in the posterior part, and turn to scales; scutellum, elytra and pygidial part thickly clothed with scales of the same colour; the pygidial part is also hairy as well as the pectus and the legs are sparingly scaly; the latter are strong and robust, the hind thighs of the male have the trochanter produced into a short, blunt spine and an inner tooth close to the knee, the hind femora have an inner tooth near the knee but more developed than the one on the thigh above it, and another and smaller one above the mucronate end, there is no apical spur; hind claw very large, single, and simple."

HETEROCHELUS STRIATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 96.

"Black, abdomen and elytra clothed with flavous or whitish scales, the latter with black bands.

Length 2‴. ♂.

From South Africa, communicated by Mr. Winthem. Allied to the preceding species, but differs by the quadri-dentate clypeus, the two median teeth of which are small and set close to each other; palpi and antennæ reddish brown; posterior part of the head and anterior part of the prothorax very dark, closely and finely punctate, opaque, and with short, black setæ, median groove and outer sides clothed with scales; scutellum and epimera of mesosternum and meta-

sternum with scales adjoining each other and which are sometimes greyish white; scales on the elytra and the posterior part of the body are either white or golden-yellow; the elytra have alternate brown costæ, the scales on which are clavate, and a little more remote than on the intervals, on each side there are usually three bands of lighter scales, the sutural one is connected at the apex with the supra-marginal one, which becomes somewhat indistinct in the anterior part, and divided longitudinally, the discoidal band is narrow and short; legs black, almost glabrous, the hind ones are gradually thickened, hind femora and tibiæ simple, the latter with a spur, tarsi as long or longer than the tibiæ, hind claw single, simple."

HETEROCHELUS (DICHELUS) SUBSPILOSUS, Nonfr.,
Deutsch. Entomol. Zeitschr., 1891, p. 257.

"Oblong, robust, brown, shining, densely fulvo-pilose on the upper side, under side opaque, fuscous brown; clypeus sub-quadrate, quadri-dentate, rugulose and shining, blackish brown, frontal part hairy, the hairs fulvous; antennæ reddish; prothorax somewhat rounded, convex, black, shining, closely and roughly punctate, clothed with flavous hairs; scutellum cordate, covered with flavous hairs; elytra shining, brown, sub-costate, densely punctate, briefly setose, the setæ flavous; pygidium and abdomen completely covered with whitish scales.

Length 7 mm.

*Hab.* Cape of Good Hope."

The shape of the hind claws is not mentioned in the description, but one may presume that they are unequal, in which case the species, if a valid one, is a *Heterochelus*.

HETEROCHELUS (ISCHNOCHELUS) PARVULUS, Burm.,
Handb. d. Entomol., iv., 1, p. 131.

"Clypeus sub-tridentate, black, antennæ legs and elytra rufous, the latter and the abdomen clothed with flavous scales.

Length $1\frac{1}{2}$ lin. ♂.

Collected by Mr. Drège. Clypeus with three blunt teeth; clypeus, head, and prothorax roughly punctulate, glabrous, but the latter part is ciliate laterally, and the posterior longitudinal groove is short; the scutellum, the testaceous elytra, and the pygidium are clothed with small, golden-yellow scales; pygidium spherical, regularly ciliate, sparsely scaly at the tip; pectus glabrous; antennæ, palpi, and legs reddish brown, the hind ones a little thickened in the male, simple

and having an apical spur; the smaller claw of the intermediate legs very weak; the species is easily recognised on that account."

HETEROCHELUS (ISCHNOCHELUS) PAUPERATUS, Burm., Handb. d. Entomol., iv., 1, p. 131.

"Black, covered with ashy-grey hairs; elytra and legs rufescent, clypeus tri-dentate.

Length 1½ lin. ♂.

*Hab.* South Africa.

From Mr. Drège's collection. Shape of the preceding species (*I. bi-partitus*), but the clypeus is tri-dentate; the clypeus, head, and prothorax are sparingly clothed with long, greyish-yellow hairs, and the elytra, which are light testaceous, have similar but appressed hairs; the scales are also wanting on the pectus, as well as on the posterior (pygidial) part of the body, and are replaced by hairs which become somewhat squamose round the pygidium and on the edge of the propygidium; the legs and the palpi are reddish brown."

HETEROCHELUS (ISCHNOCHELUS) TRUNCULUS, Burm., Handb. d. Entomol., iv., 2, p. 478.

"Completely black, shining, clothed with greyish hairs; elytra with greyish bands, abdomen very densely villose.

Length 1½ lin. ♂.

Caffraria. This species belongs to the group in which the posterior angles of the prothorax are very sharp, but it possesses two claws on the hind feet, which distinguishes it from all the others. The species is shining black with grey hairs and is depressed, only the apices of the tarsi are brownish; the clypeus is sharply angular, but not toothed; the whole surface is evenly scabroso-punctate with an erect hair in each puncture, most of the hairs are brown, but those at the hind margin of the prothorax, on the scutellum, alongside the suture, and a second row next to the latter, both forming stripes, are coloured grey; abdomen with a dense grey pubescence; the middle of the pygidium is raised in a tuft; legs with longer grey hairs, the anterior tibiæ with three sharp, approximate teeth of which the apical one is more divergent; all the tarsi with two unequal, cleft claws."

Had this species red legs it would agree with Blanchard's *H. vittiger*, but the tooth on the femur is also absent.

DICHELUS LATIPES, Nonfr.,
Deutsch. Entomol. Zeitsch., 1891, p. 257.

"Black, opaque, covered with white setæ. Body large, obovate, robust; clypeus marginate, broad, rugulose, blackish brown, opaque, antennæ brown; prothorax sub-rotund, blackish brown, opaque, densely and roughly punctured, clothed with whitish setæ; elytra broad, plane, sub-costate, densely punctate, red, clothed with whitish hairs; pygidium opaque, rugulose, covered with a whitish tomentum; under side fuscous bordering on black; mesothorax hairy, the hairs white; abdomen covered with white scales; legs and tarsi brown, anterior tibiæ sharply bi-dentate outwardly.

Length 6 mm.; width $4\frac{3}{4}$ mm.

*Hab.* Cape of Good Hope. A peculiarly depressed species."

This species is not a *Dichelus* or an *Heterochelus*, owing to the anterior tibiæ being bi-dentate outwardly. It may prove to be a *Platychelus*.

GEN. OMOCRATES, Burm.,
Handb. d. Entomol., iv., 1, p. 125.

*Goniaspidius*, Burm. (part).

Mentum long, ovate, emarginate, obliquely attenuate towards the apical part where it is emarginate, the angles are sharp, and not penicillate, the upper lobe of the maxillæ is horny, feebly penicillate at the tip, hollow, armed on each side with four robust somewhat hooked teeth and with an apical one less strongly hooked than the others, apical joint of labial and maxillary palpi swollen, fusiform, and acuminate; clypeus reflexed or dentate at the tip, short, and without a lateral basal angular projection; prothorax elongate, longer than broad, distinctly narrowed laterally in front for one-third of the length, then parallel; scutellum very long, broad at base and sharply triangular; elytra very strongly sinuated laterally and very much narrowed towards the apex; pygidium vertical and very slightly inflexed in the male; intermediate and posterior legs with an apical spur; anterior tibiæ bi- or tri-dentate outwardly, the basal teeth at right angles with the tibiæ and slightly curved downwards, the apical one slightly more oblique than in *Heterochelus;* anterior and intermediate claws double, and both cleft, posterior ones double or single; in the male the hind femora and tibiæ are sometimes very strongly dilated and ampliated (*axillaris*, *lobipes*), but they are usually only a little more robust than those of the female.

The main differences between this genus and *Heterochelus* are the

more elongated shape of the prothorax, the very narrowed elytra (this, however, occurs in some, although few, species of *Heterochelus*), and the much longer and sharply triangular scutellum.

The genus appears to be restricted to South Africa.

*Key to the Species.*

A$^2$. Anterior tibiæ bi-dentate outwardly.

B. Clypeus straight, with the outer angles very sharp.

C$^3$. Hind claws double.

$a^3$. Prothorax densely hairy and having a longitudinal impression in the posterior part.

Elytra light testaceous edged with black, clothed with appressed light hairs:

Pygidial part covered with thick, concolorous lanuginose scales, but having two patches of darker scales in the female .. .. .. .. *mendax.*

Propygidium and pygidium each with two patches of darker brown scales in both sexes .. *luridipennis.*

Pygidial scales of a uniform colour in both sexes *placidus.*

$a^2$. Prothorax hairy, broadly grooved from base to apex.

Elytra testaceous, but somewhat reddish at base and apex, pygidium with not lanuginose scales .. .. *canaliculatus.*

$a^1$. Prothorax hairy, not grooved in the central part.

Elytra light testaceous, briefly hairy; propygidium and pygidium covered with scales .. .. .. .. *cylindricus.*

Elytra light testaceous, briefly hairy, narrower and more elongate than in the preceding species .. .. *elongatus.*

B$^2$. Clypeus with three sharp teeth.

$c^2$. Hind claw single, simple.

Posterior tibiæ of male very broadly dilated, compressed, and with the carinate upper ridge strongly bi-sinuated towards the apex and curved there inwardly .. .. .. *axillaris.*

Posterior tibiæ somewhat dilated, but simple.. .. .. *modestus.*

$c^1$. Hind claw single, cleft.

Posterior tibiæ dilated, compressed and lobate at the apex .. .. .. .. .. .. .. .. .. .. .. *obipes.*

B$^1$. Clypeus quadri-dentate.

Body brick-red, elytra very briefly pubescent; pygidium with round, somewhat large scales .. .. .. .. .. .. .. *pauxillus.*

A¹. Anterior tibiæ tri-dentate outwardly.

B³. Clypeus with the outer angles dentate.

Posterior part of the prothorax of the male clothed with dense, sub-lanuginose scales; elytra and pygidial part densely scaly .. .. .. .. .. .. .. .. .. .. .. *depressus.*

Posterior part of the prothorax of the male not scaly, elytra clothed with greyish white appressed hairs; pygidium densely scaly .. .. .. .. .. .. .. .. .. .. .. *spatulipennis.*

Posterior part of the prothorax of the male not scaly, elytra hardly pubescent; pygidial part with scales so closely set as to form a coating .. .. .. .. .. .. .. .. .. .. *humilis.*

Whole surface of the body, except the head, pygidial part, and abdomen, clothed with round scales, prothorax distinctly elongate .. .. .. .. .. .. .. .. .. .. .. *placens.*

B². Clypeus tri-dentate.

Posterior part of the prothorax clothed with dense, thick scales; elytra with closely set, appressed, sub-squamose hairs; pygidial part densely scaly .. .. .. .. .. *plausibilis.*

Same vestiture as *plausibilis*, but prothorax without scales in the posterior part .. .. .. .. .. .. .. .. .. .. *variabilis.*

B¹. Clypeus quadri-dentate.

Prothorax not scaly; elytra with squamose appressed hairs, but having on each side three narrow bands of scales and the apex also scaly; hind claw single, simple .. *misellus.*

### Omocrates mendax, n. spec.

Male : Black, with the elytra light testaceous and having a lateral and apical infuscate band beginning at about the middle of the side and reaching the suture; head scabrose, clypeus quite straight at the apex and with the outer angles sharp, it is covered like the prothorax with a very dense, somewhat appressed light fulvous pubescence, and the prothorax, which is somewhat depressed in the centre of the basal part, has a longitudinal median groove; scutellum very long and sharply triangular and densely hairy; elytra as broad as the prothorax at the base, very conspicuously narrowed laterally towards the apex; plane, not costulate but having a sub-transverse basal impression near the callus, rugulose and covered with appressed, subflavescent fine hairs; propygidium, pygidium, and abdomen covered with flavescent or yellow lanuginose scales all of the same colour on the pygidium; hind legs densely hairy, hind femora and tibiæ simple, the latter moderately dilated, hind claws double, the larger one cleft;

anterior tibiæ bi-dentate outwardly, but sharply angular above the basal tooth.

Female unknown.

Length 6–6¼ mm.; width 3 mm.

*Hab.* Cape Colony (Namaqualand).

OMOCRATES LURIDIPENNIS, Burm.,
Handb. d. Entomol., iv., 1, p. 126.

Black, with the elytra and the legs reddish brown, but the elytra are occasionally testaceous at the base; the head is similar to that of the preceding species, but the outer angles are not quite so sharp; the pubescence on the prothorax is not so dense nor so villose, the elytra are also less pubescent, but in the apical part there is a somewhat distinct band of sub-squamose flavescent hairs, the propygidium has a very broad band of bright yellow hairs and two large round patches of brown tomentose scales, and the pygidium has also two similar patches at the base; the hind claws are double and both cleft; the hind legs are simple and the tibiæ are not conspicuously dilated; anterior tibiæ bi-dentate, but distinctly angular above the basal tooth.

Female: Like the male, but more hairy on the pygidial part, and with the appressed hairs concolorous.

Length 5 mm.; width 2½ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Malmesbury, Worcester).

OMOCRATES PLACIDUS, n. spec.

Entirely similar in shape and sculpture to *O. luridipennis*, but the elytra are light testaceous, and infuscate laterally behind, the pubescence on the prothorax is longer, the propygidium and pygidium are covered with thick flavescent scales of uniform colour, and the anterior tibiæ have a third tooth shorter than the second, but distinct.

Length 5 mm.; width 2½ mm.

*Hab.* Cape Colony (Worcester).

OMOCRATES CYLINDRICUS, Burm.,
Handb. d. Entomol., iv., 1, p. 128.

*O. flavipennis*, Blanch., Catal. Coll. Entom., p. 64.

Male: Black, with the elytra flavous; the head and prothorax are densely villose, the hairs flavescent, the clypeus is transversely straight at tip but the angles are sharp and slightly reflexed, and in

some examples almost dentate, in the base of the prothorax there are some squamose yellow appressed hairs forming a narrow marginal line, which is often obliterated; scutellum with yellow squamose hairs; elytra not costulate but impressed longitudinally along the suture and on the disk, roughly punctate and clothed with fine, somewhat dense, slightly flavescent appressed hairs; pygidial part and abdomen covered with contiguous round yellow scales; anterior tibiæ sharply bi-dentate, not angular, but pluri-serrate above the basal tooth; hind claw double.

Female: Like the male, but the angles of the clypeus are not so sharp, the pubescence on the elytra is not quite so dense, and the pygidial part is covered with appressed yellow hairs.

Length 4 mm.; width 2 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch).

This species is not a *Platychelus*, although described as such by Blanchard, whose type (a female) I have examined; it much resembles *O. depressus*, *spatulipennis*, &c., but is at once distinguished by the bi-dentate fore tibiæ.

### Omocrates canaliculatus, Blanch., Catal. Coll. Entom. Mus. Par., p. 66.

Male: "Black, nearly glabrous, antennæ, palpi, legs, and abdomen rufous; head rugose, clypeus quadrate with the angles slightly prominent; prothorax convex, punctate, shining, sides setose, median part very broadly furrowed; scutellum fuscous; elytra short, punctate, testaceous, somewhat rufescent at the base and at the apex; pygidium clothed with flavous scales; anterior tibiæ bi-dentate outwardly.

Length 4 mm.

*Hab.* Cape of Good Hope."

The only example that I have seen is Blanchard's type. It is very closely allied to *O. spatulipennis*, but it is glabrous on the upper side, and the prothorax has a very broad median sulcus.

### Omocrates elongatus, Blanch., Catal. Coll. Entom. Mus. Par., p. 66.

Male: "Narrow, black, pilose, the hairs ashy-grey, antennæ and palpi fuscous; clypeus concave with the angles projecting; prothorax convex, closely punctate, clothed with greyish hairs; scutellum squamose; elytra testaceous red, elongate, sparsely pilose; legs black, tarsi of the hind legs red at apex; anterior tibiæ bi-dentate,

hind claws unequal, inner one simple; abdomen and pygidium clothed with greyish hairs.

Length 5¼ mm.

*Hab.* Cape of Good Hope."

I have seen only Blanchard's type of this species, which is much more elongated than the other species of *Omocrates*.

### Omocrates axillaris, Burm.,
Handb. d. Entomol., iv., 1, p. 125.

Male: Black, with the elytra pale testaceous and edged with a fuscous marginal band broadening towards the posterior part; head and prothorax clothed with a dense, erect, sub-flavescent pubescence, the clypeus is armed at apex with three long, triangular teeth, and the prothorax has an elongated impression in the median discoidal part; scutellum slightly carinate longitudinally in the centre, and clothed with a few greyish hairs; elytra covered with deep, irregular punctures, very briefly pubescent, propygidium and pygidium clothed with dense, thick, flavescent or yellow scales, abdomen without scales, pectus villose, the hairs greyish white; hind femora robust, simple but deeply grooved underneath for half the length, hind tibiæ broadly dilated, spatuliform, the upper edge is strongly sinuate and curves inwardly at the apex; hind claws single, simple.

Female: Like the male, but the propygidium and pygidium are covered with squamose appressed flavescent hairs and the pygidium has two distinct patches of browner hairs in the centre.

Length 6¾–7 mm.; width 3–3¼ mm.

*Hab.* Cape Colony (Malmesbury, Worcester).

In shape and colouration it is like *O. mendax*, but it is easily distinguished by the form of the hind legs.

### Omocrates modestus, n. spec.

Male: Entirely similar to *O. axillaris* in colour, vestiture, and build, but it is very much smaller; the clypeus is also sharply tridentate, but the median tooth is smaller than the lateral ones, the hind legs are robust, the hind femora are dilated, compressed, the upper margin is straight, and the lower slightly ampliate at middle; the scales on the propygidium and pygidium are so closely set that they form a thick coating, and they are not yellow as in *O. axillaris*; the hind claw is single and simple.

Female unknown.

Length 5 mm.; width 2½ mm.

*Hab.* Cape Colony (Kowie).

OMOCRATES LOBIPES, Burm.,
Handb. d. Entomol., iv., 1, p. 125.

"Black, shining, hairy, the hairs underneath are white, the elytra pale and edged with black, pygidium with flavous scales.

Length 2‴.

Male: This species is shaped like *O. axillaris* and resembles it completely, but it is easily distinguished by the shape of the hind legs, which are also strongly compressed laterally, but are produced into an upright, broad lobe rounded on the upper side of the apex; there is an apical spur, and the hind claw is single but cleft. The colour and sculpture are the same, the hairs are longer and much denser."

From the description this species, which I have not seen, is very closely allied to *O. modestus*, but in the latter the hind tibiæ, although dilated, are not lobate on the upper side.

*Hab.* Cape Colony.

OMOCRATES PAUXILLUS, n. spec.

Female: Brick-red, with the head and anterior part of the prothorax slightly infuscate; the clypeus is briefly quadri-dentate, the teeth are equal; the prothorax is very slightly pubescent, and not closely punctulate behind; the scutellum is slightly carinate longitudinally and scarcely pubescent; the elytra have an appressed, greyish pubescence, the apical margin of the propygidium and the pygidium are covered with round contiguous yellow scales; the abdomen and pectus have somewhat dense, long, whitish hairs, and the hind claw is single and simple.

I do not know the male of this species, which will be easily distinguished, however, by the quadri-dentate clypeus.

Length 4½ mm.; width 2 mm.

*Hab.* Cape Colony (Worcester).

OMOCRATES DEPRESSUS, Blanch.,
Catal. Coll. Entom. Mus. Par., p. 67.

Male: Black, with the legs red; clypeus with the outer angles dentate, the head is covered with a very short, erect pubescence, and the prothorax also, but this short pubescence is intermingled with golden-yellow squamose hairs on the prothorax; scutellum densely scaly; elytra densely clothed with somewhat round, golden-yellow scales which are not, however, contiguous, and are somewhat more elongated and hair-like on the sides and on the apical margin; the propygidium, pygidium, and abdomen are thickly covered with golden

yellow scales; hind legs simple, hind claw single, deeply cleft laterally.

Female: Like the male, but the prothorax is less scaly, and the scales on the elytra and the pygidial part are a little paler in colour, and those on the pygidial part are more hair-like.

Length 4–4¼ mm.; width 2 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch).

Blanchard, in his description of the species, states that the anterior tibiæ are bi-dentate, but such is not the case; the tibiæ of the type are tri-dentate.

### Omocrates spatulipennis, Blanch.,
### Catal. Collect. Entom. Mus. Par., p. 66.

*O. lepidus*, Boh., Insect. Caffr., ii., p. 150.

Male: Black, with the elytra light testaceous, and the legs piceous or piceous red; similar in shape and sculpture to *O. depressus*, but the clypeus is much more strongly dentate on each side of the apex, and is also a little more concave in front; the prothorax has no scale, and is clothed with dense greyish villose hairs from the base to two-thirds of the length, and has a very narrow border of appressed greyish or sub-flavescent hairs along the base; scutellum with squamiform yellow hairs; elytra with appressed, not dense, hair-like, short yellow scales; pygidial part and abdomen clothed with contiguous, round, bright yellow scales; hind claws double, and both distinctly cleft.

Female: Like the male, but the clypeus is not so sharply dentate on each side, the hairs on the elytra are more filiform, and the scales on the pygidial part and abdomen are replaced by appressed white hairs.

Length 4¾–5¾ mm.; width 2¼ mm.

*Hab.* Natal (Durban, Frere).

### Omocrates placens, n. spec.

Closely allied to *O. depressus*, the shape of the clypeus is the same, but the prothorax is more elongated and less attenuated laterally in the anterior part, the prothorax is completely covered with closely set, slightly lanuginose scales nearly similar to those on the elytra, these scales are greyer and even in the pygidial part they are only flavescent instead of being bright yellow; the hind claw is simple and cleft sideways as in *O. depressus*.

Length 3¼–4 mm.; width 1⅘–2 mm.

*Hab.* Cape Colony (Stellenbosch, Caledon)

OMOCRATES HUMILIS, n. spec.

Male: Intermediate between *O. depressus* and *O. spatulipennis;* black, with the elytra testaceous and the legs rufescent; the clypeus is dentate on each side, the prothorax is covered from the base to three-fourths of the length with villose erect greyish hairs, and there is no basal band of appressed hairs; the elytra have a few inconspicuous, pallid, appressed hairs, the propygidium and pygidium are covered with contiguous, pale yellow, round scales, and the edge of the abdominal segments have more elongate, somewhat filiform ones of the same colour; the anterior tibiæ are tri-dentate outwardly, but the basal tooth is much shorter than the intermediate one; the hind claws are double and both slightly cleft.

Female: Like the male, but the pygidial part and abdomen are villose.

Length $4\frac{1}{2}$ mm.; width 2–$2\frac{1}{4}$ mm.

*Hab.* Cape Colony (Worcester).

OMOCRATES PLAUSIBILIS, n. spec.

Male: A very distinct species. Black, with the elytra light testaceous and the legs reddish; clypeus sharply tridentate, the median tooth as much raised as the lateral ones; prothorax clothed for two-thirds of the length with dense, erect, greyish villose hairs, the posterior part is covered with dense, yellow, somewhat elongated scales; scutellum and elytra covered with similar scales; pygidial part closely scaly, the scales somewhat round and deeper yellow than on the elytra; abdomen with squamose appressed hairs flavescent on the apical segments and turning to white on the basal ones; hind claws double, the inner one is small and simple, the outer one is slightly cleft laterally.

Female unknown.

Length $5\frac{1}{2}$ mm.; width $2\frac{4}{5}$ mm.

*Hab.* Cape Colony (Burghersdorp).

OMOCRATES VARIABILIS, Burm.,

Handb. d. Entomol., iv., 1, p. 128.

Male: Black, with the elytra light testaceous and the basal part narrowly fuscous, or occasionally with the prothorax reddish, hind legs reddish brown; clypeus tri-dentate, median tooth a little smaller than the lateral ones which are distinctly reflexed; prothorax clothed for two-thirds of the length with a short, dense, greyish pubescence, and having a narrow basal band of greyish, sometimes sub-flavescent

scales; scutellum densely scaly; elytra also densely scaly, the scales elongated, sub-lanuginose and not unlike appressed squamose hairs; these scales are greyish or sub-flavescent, those with which the abdomen is densely clothed are almost similar in shape, but on the pygidial part they are normally rounded and more flavescent; hind claws double and both cleft.

Female: Like the male, but the pygidial part is scaly.

Length $3\frac{1}{2}$–$4\frac{1}{2}$ mm.; width 2–$2\frac{1}{2}$ mm.

*Hab.* Cape Colony (Port Elizabeth, Uitenhage).

OMOCRATES MISELLUS, n. spec.

Female: Black, with the elytra pale flavous, legs rufescent; clypeus quadri-dentate, but with the four teeth equal but not strongly developed; prothorax clothed all over the surface with long, greyish white villose hairs, it has in the centre a deep, median sulcus reaching from base to apex; scutellum with squamose greyish hairs; elytra covered with short, flavescent sub-squamose, not densely set hairs, but having also along the suture, the discoidal part, and the outer margin a distinct but not conspicuous narrow band of ovate scales not set close to each other except on the apical margin where they are denser and deeper yellow; the propygidium and pygidium are clothed with contiguous golden yellow scales; the abdomen is also clothed with similar scales which, however, turn to white on the anterior segments; hind claws single, simple.

In the male the scales on the elytra are probably more yellow and the bands more distinct.

Length $5\frac{1}{4}$ mm.; width $2\frac{1}{2}$ mm.

*Hab.* Cape Colony (Namaqualand).

A distinctive character of this species is the deep median groove extending from base to apex on the prothorax; the only other species in which there is a similar groove is *O. canaliculatus*, but the clypeus is not dentate and the anterior tibiæ are said to be bi-dentate outwardly.

GEN. GONIASPIDIUS, Burm.,

Handb. d. Entomol., iv., 1, p. 126.

Mentum elongate, oblong, slightly emarginate at tip where it is densely fasciculate on each side, the upper lobe of maxillæ short, broad, transversely concave, and armed with four robust, elongate teeth, arranged in a line along the apical part, the inner tooth is strongly bifid, apical joint of palpi very swollen, especially the maxillary one, fusiform and acuminate; clypeus sharply tri-dentate

with the teeth strongly reflexed, and moderately angular laterally at the base; prothorax moderately convex; scutellum as broad as long, straight laterally for more than half the length and thence sharply triangular, impressed transversely in the basal part; elytra somewhat triangular, distinctly narrowed laterally towards the apex and sinuate below the humeral part, but leaving only a narrow part of the surface of the abdominal segments uncovered; pygidium broad, flat, and greatly inflexed in the male; anterior tibiæ tri-dentate outwardly, the two basal teeth connate at the base and the apical one oblique as in *Heterochelus*, hind legs moderately slender and simple in both the sexes; all the claws double, the inner one of the intermediate and hind legs small, and very small respectively, and the outer cleft; posterior tibiæ with a distinct apical spur.

Of the three species included in the genus by Burmeister I retain *G. brevis* only, the other two are true *Omocrates*. The distinctive characters of *Goniaspidius* are—(*a*) the singular shape of the upper lobe of the maxillæ, which is short, broad, transverse, with the teeth disposed along the upper margin, whereas in *Omocrates* it is long, narrow, and sub-lanceolate, and (*b*) the shape of the scutellum which, instead of being regularly triangular, is rectangular and triangular only at apex, and deeply impressed transversely at the base.

*Key to the Species.*

| | |
|---|---|
| Elytra black or reddish brown according to the sex, and having each three bands of squamose greyish-white hairs; apical tooth of anterior tibiæ widely separated at apex from the intermediate one and longer .. | *brevis.* |
| Elytra testaceous and with a fuscous border all round, apical tooth of anterior tibiæ strongly turned downwards like the other two and not broadly separated from the intermediate one .. .. .. .. | *simplex.* |

GONIASPIDIUS BREVIS, Burm.,

Handb. d. Entomol., iv., 1, p. 127.

Black in the male, but with the discoidal part of the elytra and the legs reddish brown in the female, which is in other respects entirely similar to the male; head and prothorax clothed with villose, dense, greyish and black hairs, the clypeus has in front three long, sharp, reflexed teeth all of equal size; the prothorax, which is not very convex in the centre, is depressed in the basal part, which is nearly impunctate, the rest of the surface is, however, scabroso-punctate; scutellum hairy along the apical border; elytra scarcely broader than the base of the prothorax, plane, punctulate, distinctly narrowed laterally from the humeral part towards the apex, not costate, but slightly impressed longitudinally along the suture,

and having on each side three bands of appressed squamose greyish white or slightly flavescent hairs, the juxta-sutural band of hairs is broader than the other two which are sometimes partly obliterated; propygidium clothed with appressed, squamiform, sub-flavescent hairs; under side somewhat densely hairy; apical tooth of anterior tibiæ somewhat widely separated at apex from the intermediate one, and also longer.

Length 5½–6 mm.; width 3¼–3½ mm.

*Hab.* Cape Colony (Worcester).

GONIASPIDIUS SIMPLEX, n. spec.

Male: Black, with the elytra testaceous, but having a broad fuscous border all round; head and prothorax clothed with dense black and greyish villose hairs, the clypeus has three conspicuous reflexed teeth at the apex; the prothorax is scabroso-punctate from the apex to the base, which is not very depressed; elytra plane, strongly sinuate laterally under the humeral part, thence distinctly attenuate towards the apex, not costate, but having the customary longitudinal impression along the suture deeply and closely punctured, the punctures bearing each a black, erect hair; pygidium broad, conspicuously declivous forwards, briefly hairy; under side villose, the hairs greyish white; the apical tooth of the anterior tibiæ is not very oblique and is turned downwards like the two basal ones.

Female unknown.

Length 5½–7 mm.; width 3–3½ mm.

*Hab.* Cape Colony (Worcester).

This species is distinguished from *G. brevis* by the slightly more elongated elytra, and the absence of bands of squamiform appressed hairs.

GEN. DICRANOCNEMUS, Burm.,

Handb. d. Entomol., iv., 1, p. 135.

Mentum narrow, very elongated, a little ampliated laterally towards the median part, narrowed at the insertion of the labial palpi, straight at tip, but with the angles rounded and penicillate; upper lobe of maxillæ horny, narrow, very long, with a long pencil of hairs at the tip, and having inwardly and in the upper part five short, curved teeth arranged in a line, inner lobe membranaceous, and penicillate, apical joint of labial palpi somewhat swollen and distinctly truncate at the tip, that of the maxillary palpi very elongated, slender, subfusiform inwardly and sinuate outwardly; clypeus short, attenuate laterally, sometimes angular at the base and dentate on each side

(*sulcicollis*, *pulcher*), or straight with the angles either very sharp (*natalensis*), or slightly rounded; prothorax very convex and villose; scutellum short, triangular; elytra sinuate laterally, distinctly narrowed towards the apex, plane, more or less densely scaly; propygidium broadly uncovered, pygidium vertical in the male; legs moderately robust, similar in the two sexes; anterior tibiæ tri-dentate outwardly, but with the two apical teeth connate at the base and widely separated from the basal one, all three teeth long and sharp, set at right angles with the tibia and bending downwards; claws of anterior legs double, the outer one cleft, those of the intermediate and hind ones single, but deeply cleft; in two species (*squamosus*, *squamulatus*) the claw of the intermediate legs has a conspicuous tooth underneath in the male.

*Key to the Species.*

A$^2$. Median claw simple underneath.

B$^3$. Clypeus sharply angular on each side.

Clypeus very narrowed towards the apex; prothorax villose, not scaly; elytra covered with minute not closely set sub-flavescent scales .. .. .. .. .. .. .. .. .. *natalensis.*

B$^2$. Clypeus sharply dentate on each side at apex, and also laterally.

Teeth of clypeus long, reflexed; prothorax clothed with very long, villose hairs, scaly along the base and in the median groove which is very broad behind; elytra with two lateral bands of golden-yellow scales and two quadrate patches on the suture .. .. .. .. .. .. *sulcicollis.*

Teeth of the clypeus angular, not reflexed; prothorax covered with a shorter pubescence, disposition of scales on the elytra as in the preceding species .. .. .. .. .. *pulcher.*

B$^1$. Clypeus not dentate on each side at the apex or laterally.

Prothorax pubescent and having a narrow basal band of scales, elytra with three bands and a transverse patch of golden yellow scales on each side .. .. .. .. .. .. *hypocrita.*

Prothorax briefly pubescent and covered with scales from the median part of the disk to the base; elytra entirely covered with flavescent scales and having two lines and a transverse median patch of white scales .. .. .. .. *mendicus.*

Prothorax pubescent, narrowly edged with scales along the base; elytra covered with concolorous yellow scales .. .. *pulverulentus*

A$^1$. Median claw with a conspicuous tooth underneath.

Prothorax densely pubescent and without scales; elytra with minute scattered scales looking like appressed hairs .. .. .. *squamulatus.*

Prothorax densely pubescent and with a basal band of appressed squamiform hairs; elytra with three broad bands of yellow scales, or nearly completely covered by the scales .. .. .. *squamosus.*

DICRANOCNEMUS NATALENSIS, n. spec.

Male: Black, with the elytra very light testaceous; antennæ with the exception of the two basal joints, black; head rugose, covered with a greyish short pubescence, clypeus conspicuously narrowed laterally towards the apex, emarginate at the tip and with the two angles sharply triangular and reflexed; prothorax moderately convex, densely scabrose, clothed with a dense, somewhat long, slightly silky grey pubescence, and having only a very faint longitudinal furrow in the posterior part; scutellum covered with greyish round scales; elytra not costulate, and covered with small elongate, flavescent scales, not very closely set; pygidial part and abdomen with dense flavescent round scales; tarsi reddish; claw of intermediate legs simple underneath.

Female: Exactly like the male, but the scutellum and elytra have appressed greyish hairs instead of scales, and the scales on the pygidial part and the abdomen are replaced by thick appressed squamiform hairs; the tibiæ and tarsi are red.

Length $5\frac{1}{4}$–$5\frac{1}{2}$ mm.; width 3 mm.

*Hab.* Natal (Estcourt).

In general appearance this species resembles *Omocrates spatulipennis*, and is very distinct from the others.

DICRANOCNEMUS SULCICOLLIS, Wiedem.,
Germ. Magaz., iv., p. 144.

Male; Black, with the elytra fulvous and having on each side three somewhat broad bands of golden-yellow round scales, the two discoidal bands are sometimes not interrupted in the middle, but oftener than not the median one is so, and the sutural one is interrupted at about the median part, this interrupted part forms thus a quadrangular patch; head very rugose, clothed with a flavescent pubescence, the clypeus has the two angles of the apical part produced into a strongly reflexed tooth, and there is a shorter triangular tooth laterally at the base of the clypeus; prothorax conspicuously convex in the posterior part, scabroso-punctate in the anterior part only, punctate on the rest of the surface, and clothed with a very long and very dense, erect, flavous pubescence, it is distinctly grooved longitudinally, and this groove is partly filled with squamose yellow hairs which form also a somewhat broad band along the

base; scutellum clothed with appressed hairs; elytra very closely punctulate, not costulate, sinuate laterally and distinctly attenuate towards the apex, the basal part is pubescent, and the scales forming the two bands and the median transverse patch are round and very closely set; pygidial part and abdomen clothed with thick lanuginose yellow hairs; legs and pectus densely villose; claw of intermediate legs without a tooth underneath.

Female: Like the male, the prothorax is less densely villose, and less squamose along the base, but the vestiture of the elytra and underneath is similar to that of the male.

Length $4\frac{3}{4}$–$6\frac{1}{2}$ mm.; width $2\frac{1}{2}$–$4\frac{1}{4}$ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury. Worcester, Ceres, Tulbagh).

### Dicranocnemus pulcher, n. spec.

Male: Shape and vestiture of *D. sulcicollis*, of which it is a very close ally, but the shape of the clypeus is different owing to the lateral tooth and the angles of the apical part not being reflexed and hardly prominent; the median groove of the prothorax is not so deep, and the pubescence is shorter; the scales are not so golden yellow, and those on the scutellum and the median part of the discoidal band, and also on the post-scutellary patch, are slightly whitish.

Female: Shaped like the male, but the prothorax is covered with a densely dark pubescence turning to bright fulvous on the sides, and the furrow is filled with a narrow, similar band; the elytra are covered with a chocolate tomentum, and the bands of scales and also the post-scutellary patch are very slender. I am not quite sure, however, that the insect thus described is the female of *D. pulcher*. The clypeus is hardly angular at the tip.

Length 5–$5\frac{1}{2}$ mm.; width $2\frac{3}{4}$ mm.

*Hab.* Cape Colony (Worcester, Caledon, Knysna).

### Dicranocnemus hypocrita, n. spec.

Male: Almost similar to *D. pulcher*, but a little shorter; the apical angles of the clypeus are distinctly rounded, and there is no lateral prominence at the base; the prothorax is briefly villose, and has a similar basal lateral patch of squamose flavescent hairs and a fine line of yellow scales filling also part of the median groove; the elytra have only two bands of bright yellow scales uniting in the median part and the sutural patch, the scales of which are whitish, is connected with the scaly apical part by a narrow line of scales, these scales leave

thus three denuded places on each side; pygidial part and abdomen clothed with dense, golden-yellow scales; legs rufescent, villose; claw of the intermediate legs simple.

Female: Like the male, but with the hair-like scales on the elytra more scattered or less plainly banded, the sutural whitish patch indistinct.

Length 4 mm.; width 2 mm.

*Hab.* Cape Colony (Caledon, Worcester).

DICRANOCNEMUS MENDICUS, n spec.

Male: Black, with the elytra reddish brown; apical angles of the clypeus slightly sharp; prothorax clothed with a sub-appressed squamose pubescence turning to flavescent scales on the whole of the posterior half, the longitudinal furrow is very distinct; scutellum densely scaly, the scales somewhat pallid; elytra entirely clothed with flavescent ovate scales, bi-costulate and having in each interval, on each side, a somewhat distinct band of paler scales, the scales of the sutural patch are also of the same colour; scales on the pygidial part and abdomen similar in colour to those on the background of the elytra; legs briefly setulose; claw of intermediate legs simple.

Female: Clypeus less angular laterally at tip than in the male; prothorax clothed with a short, non-squamose pubescence, and without scales; elytra less distinctly costulate, and covered like the scutellum with greyish, sub-squamose appressed hairs; scales on the pygidial part and abdomen nearly similar to those of the male, but a little less closely set on the pygidium.

This species is easily distinguished from the preceding one by the scaly posterior half of the prothorax, and by the whole surface of the elytra being also scaly, but having the customary bands and patches of paler scales.

Length $4\frac{1}{4}$–$4\frac{1}{2}$ mm.; width $2\frac{3}{4}$–3 mm.

*Hab.* Cape Colony (Uitenhage, Graham's Town).

DICRANOCNEMUS PULVERULENTUS, Burm.,
Handb. d. Entomol., iv., 1, p. 137.

Male: Short and robust facies of *D. mendicus;* this species is easily distinguished from the four preceding in having the elytra covered almost uniformly with round, golden scales which are not disposed in bands, but there is still a faint trace of a sutural whiter patch under the scutellum; in some examples, however, the two costules on each side are somewhat distinct, and partly denuded at

the basal part; clypeus with the apical angles rounded, and emarginate in the centre of the apex; prothorax clothed with a greyish not very short pubescence, and having along the base a somewhat broad band of yellow scales which fill also the longitudinal groove for one-third of the length; scutellum covered with scales which are a little lighter in hue than those covering the elytra; scales on the pygidial part and abdomen golden-yellow; legs piceous red, setulose; claws of intermediate legs simple underneath.

Female: Clothed like the male, except that there is no basal band of scales on the prothorax, the clypeus is not emarginate at apex, and the angles are a little more rounded than in the male.

Length $4\frac{1}{4}$ mm.; width $2\frac{3}{4}$ mm.

*Hab.* Cape Colony (Riversdale, Uitenhage, Port Elizabeth).

DICRANOCNEMUS SQUAMULATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 136.

Male: Black, with the elytra light testaceous and having some scattered, although nearly equi-distant, flavescent, minute, elongate scales a little denser occasionally along the suture and the apical margin; clypeus straight at the tip, and with the angles distinct; prothorax clothed with a dense, somewhat long, greyish, slightly flavescent pubescence, and having a narrow basal line of yellow scales, which fill also partly the posterior part of the median groove; scutellum covered with thick squamose yellow hairs; elytra very slightly costulate, the scales are more like very short hairs; pygidial part and abdomen clothed with very dense golden-yellow round scales; legs piceous red or reddish; claws of intermediate tarsi with a distinct tooth underneath.

Female: Resembles the male very much, except for the shape of the pygidium and the absence of the tooth under the intermediate claw.

This species is easily distinguished from *D. squamosus*, the male of which has also a tooth under the claw of the intermediate legs, by the hair-like scales scattered on the elytra, but there is still a tendency for these scales to be grouped into a sutural patch.

Length 4–5 mm.; width 2–3 mm.

*Hab.* Cape Colony (Uitenhage, Graham's Town).

DICRANOCNEMUS SQUAMOSUS, Burm.,
Handb. d. Entomol., iv., 1, p. 136.

Black, with the elytra testaceous red; anterior angles of the clypeus distinctly rounded; prothorax clothed with a very dense,

long, flavescent pubescence, and having a somewhat broad band of appressed squamose scales along the base; the median groove is only moderately deep; scutellum densely squamose; elytra bi-costulate and either completely covered with round, golden-yellow scales set close to each other or forming the two usual bands of scales on the disk and above the outer margin, and the interrupted sutural one, the median patch of which is occasionally paler than the other scales; the pygidial part and the abdomen are densely scaly, the scales a little lighter yellow than those on the upper side; legs piceous, tarsi reddish, claw of the intermediate legs with a robust tooth underneath.

Female: Shape of the male, but a little smaller, the scales on the elytra are replaced by squamose flavescent hairs, and the elytra are darker brown.

Length 4–5¼ mm.; width 2½–3 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Port Elizabeth, Graham's Town, Kowie).

## Gen. NANNISCUS, Burm.,

Handb. d. Entomol., iv., 1, p. 137.

Mentum narrow, elongate, upper lobe elongate, penicillate at tip and not dentate; palpi as in *Dicranocnemus;* clypeus a little attenuate laterally and quite parabolic in front; prothorax somewhat plane, distinctly attenuate laterally; scutellum moderately long and broad, triangular; elytra plane, sinuate laterally, and moderately attenuate towards the apex; pygidium broad, sloping forwards; legs moderately slender; anterior tibiæ bi-dentate, but with the apical tooth bluntly bifid; all claws double and both cleft; posterior tarsi very long; hind femora of male robust, simple like the tibiæ, which have an apical spur.

The distinctive characters between this genus and *Dicranocnemus* are the absence of teeth in the inner part of the upper maxillary lobe, and the shape of the apical outer teeth of the tibiæ, which are fused into one, which is, however, slightly bifid at the tip; the shape of the clypeus is different, and the prothorax is much more plane.

Only one species of this genus is known.

### Nanniscus pulicarius, Burm.,

Handb. d. Entomol., iv., 1, p. 138.

Black, with the elytra testaceous and the legs rufescent; head and prothorax rugulose, covered with an appressed greyish pubescence

without trace of scales; scutellum and elytra covered thickly with thick, appressed, somewhat squamose greyish white hairs with a slight sheen, and which, although thick, do not hide the colour of the background, they are plane, not costulate, sinuate laterally below the humeral part, a little attenuate towards the apex, and leave the greatest part of the propygidium uncovered; pygidial part and abdomen densely scaly, the scales are white and smaller and rounder on the pygidium; legs moderately pubescent, hind femora robust but simple, like the tibiæ.

Female unknown.

Length 3 mm.; width $1\frac{4}{5}$ mm.

I have seen only one male example presented by Drège and bearing his Catalogue name.

*Hab.* Cape Colony (no exact locality).

## Gen. DIAPLOCHELUS, Burm.,

Handb. d. Entomol., iv., 1, p. 132.

Mentum elongate, somewhat ovate in the basal part, but narrow, thence deeply incised laterally towards the tip at the point of insertion of the palpi, apical part sloping a little towards the outer angles and fringed, except for a narrow space in the middle, with long, dense, ciliate hairs; upper lobe of maxillæ as broad as long, obliquely emarginate on the upper outer part and with the emargination filled with a broad bunch of hairs, quadri-dentate inwardly with the two lower teeth double on the left jaw while in the right these two teeth are set in a line, the lobe is therefore six-dentate, inner lobe sharply angular at tip (*crassipes*, *transvaalensis*) or very feebly tri-dentate (*longipes*) apical joint of labial palpi sub-fusiform and truncate at tip, that of the maxillary palpi sub-cylindrical; antennæ normally 10-jointed; clypeus rounded laterally at the tip and slightly reflexed there, not angular laterally in the basal part; prothorax depressed and a little rounded laterally; scutellum sub-ogival but somewhat rounded at the tip; elytra elongated, slightly and gradually narrowed laterally towards the apex, but not sinuate below the humeral part; propygidium partly uncovered by the elytra; pygidium very declivous forwards in the male, vertical in the female; anterior tibiæ tri-dentate, the two basal teeth are set at right angles with the tibia, and the apical one is slightly oblique, the anterior claws are double and both cleft, the median ones single and cleft, and the posterior ones either single and simple, or double and cleft; the metasternum is impressed in the male.

*Key to the Species.*

$a^2$. Hind claw single, simple.

Hind tibiæ of the male elongated, not thickened, simple.. .. *crassipes.*

$a^1$. Hind claws double, the larger one cleft.

Hind tibiæ of the male short, dilated, and with the margin simple.. .. .. .. .. .. .. .. .. .. .. .. .. .. *longipes.*

Hind tibiæ of the male short, dilated, and with the lower margin pluri-dentate .. .. .. .. .. .. .. .. .. *transvaalensis.*

DIAPLOCHELUS CRASSIPES, Burm.,
Handb. d. Entomol., iv., 1, p. 133.

*D. squamulatus*, Burm., ibid., p. 134.

Male: Black, with the elytra pale testaceous or testaceous red, and the legs rufescent, but occasionally the elytra and legs are black; the head, prothorax, pectus, and legs are clothed with a very dense fulvous pubescence, the scutellum is covered with greyish or slightly flavescent scales which form also a marginal band on the elytra, this band ascends a little along the suture; head very rugose, clypeus broadly rounded laterally, slightly curved at apex and marginated all round; prothorax elongate, somewhat convex, very feebly grooved in the middle of the posterior part, covered with deep and dense but not contiguous punctures bearing each a very long seta, the median basal part is, however, impunctate; prothorax densely scaly; elytra shining, distinctly costate and with the intervals remotely punctate, they are elongate, very little sinuate laterally past the humeral part, and a little narrowed towards the apex; in the punctures are occasionally a few whitish scales, but the propygidium, pygidium, and abdomen are covered with closely set, dense, flavescent scales similar in shape to those edging the posterior part and the outer margin of the elytra; the apical part of the pygidium is fringed with very long, flavescent setæ; posterior femora robust, but not very swollen, and without any sharp trochanters, articulation of the knee rounded on each side, hind tibiæ elongated, robust but not very ampliate, somewhat sub-mucronate on each side at apex, and without an apical spur; joints of hind tarsi short, closely set, fifth joint robust, elongate, as long as the other four taken together, and bi-dentate underneath, hind claw single, simple.

Female: Like the male, but the elytra are more distinctly striate, and the punctures more numerous, the lateral and apical marginal bands of scales are narrower, and the scales less dense and a little more hair-like.

Length 8–10 mm.; width 4–4¼ mm.

*Hab.* Cape Colony (Stellenbosch, Paarl, Worcester, Caledon, Graham's Town).

In all my examples from the western part of the Cape Colony the scutellum and elytra are only sparsely squamulose, but in some from Graham's Town the whole of the elytra, as well as the scutellum, is entirely covered with very dense, light fulvous scales.

DIAPLOCHELUS LONGIPES, Fabric.,
Mantiss. Insect., i., p. 24.
Oliv., Entomol., i., 5, p. 76, pl. vii., fig. 72.

Male: Black, with the elytra pale testaceous and shining, legs and abdomen reddish; palpi and antennæ pale rufescent; head deeply and closely punctured but not scabrose, covered with somewhat sparse, short erect hairs, and having a lateral fringe of long setæ; prothorax convex, grooved longitudinally, sparsely punctured, the punctures deep and bearing each a very short hair; scutellum with a few scales; elytra very slightly costulate, sparsely and deeply punctate, densely scaly (*squamulatus*, *longipes*) or only sparsely so; propygidium with a few elongate scales, pygidium glabrous, but thickly fringed at apex with villose hairs; abdomen with a few hair-like appressed scales on the upper side of the segments; claws of intermediate legs double, and both slightly cleft, hind claws double, the inner one deeply cleft at the tip; hind femora robust, simple; hind tibiæ sinuated outwardly, gradually dilated and compressed, and with the lower margin simple, they are setulose on the upper side, which is somewhat deeply emarginate above the apex, and they are not mucronate, but strongly bristly all round at the apex, there is no apical spur; the joints of the tarsi are bristly, somewhat elongated, and the fifth joint is simple.

Female: Like the male, but the hind legs are more slender, the hind tibiæ are simple, and they have a long apical spur.

Length 5½–7 mm.; width 3–3½ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Malmesbury, Tulbagh, Worcester, Paarl).

DIAPLOCHELUS TRANSVAALENSIS, n. spec.

Allied to *D. longipes*, from which it differs mainly by the shape of the hind tibiæ of the male; the head alone is black, the prothorax, legs, and under side being reddish, and the elytra brick-red, the clypeus is a little narrower; the sides of the prothorax are much more numerously punctate, and the pubescence on the sides is therefore denser; the elytra are more roughly and numerously punctured

between the two costules, which are very distinct, and the punctures bear each a minute sub-flavescent scale; the pygidium and also the propygidium have small, ovate, flavescent scales either partly rubbed off or very scattered; in the male the trochanters project as a small but distinct spine, the robust hind tibiæ have a short, sharp spine in the inner part of the knee, the hind tibiæ are emarginate near the knee, compressed and gradually dilated underneath into a laminate sub-elongato-quadrate process, the lower edge of which is quadridentate, the fourth tooth forming a sort of apical mucro, the basal part of the tibia is grooved underneath, and there is no apical spur; the joints of the hind tarsi are conical, somewhat short, but not closely set, the fourth joint is simple underneath, and the hind claw is double, the shorter one being alone cleft.

Length $5\frac{1}{2}$–7 mm.; width $3\frac{1}{4}$–$3\frac{1}{2}$ mm.

*Hab.* Transvaal (Johannesburg).

## BIZANUS, n. gen.

Mentum long, very narrow but slightly expanding at the apex where it is somewhat rounded and sub-penicillate; lobe of maxillæ short, narrow, simple, but having at the tip a pencil of hairs longer than the whole maxilla; apical joint of labial palpi more than twice as long as the other two taken together, that of the maxillary also long, straight inwardly but fusiform outwardly; antennæ normal; clypeus narrower than the head, nearly parabolic and with the apical margin reflexed; prothorax, scutellum, elytra and pygidium as in *Heterochelus;* in the male, however, the claw of the intermediate legs has alongside of it another one equally robust but shorter, and pointing downwards as in some species of *Dicranocnemus*, *Monochelus*, &c., but instead of being a part of the claw it projects laterally from the base itself; the female has also this claw, but it is somewhat rudimentary; in the male the hind legs are very robust.

This genus differs from *Heterochelus* by the rounded shape of the clypeus, and the absence of teeth on the maxillary lobe; from *Diaplochelus*, in which the clypeus is nearly similar, it differs by the absence of teeth on the maxillary lobe, and also in the general facies, which is that of an *Heterochelus*.

### Bizanus caliginosus, n. spec.

Male: Black, with the fore legs rufescent, the elytra are chocolate-brown and covered with nearly contiguous ashy-grey scales, the propygidium and abdomen have deep yellow scales, but the pygidium has none; the head is very rugose, the clypeus is very much rounded

laterally, but somewhat straight at the tip the margin of which is distinctly reflexed; prothorax scabroso-punctate and covered with somewhat dense, black and sub-flavescent hairs; scutellum covered with scales; elytra bi-costulate on each side, the lanciform scales are set very close to each other, but they have no sheen and form a sort of tomentum; the pygidium is very briefly pubescent and has no scales; the claws of the anterior legs are double and both cleft, that of the intermediate one is single and deeply cleft laterally, the hind one is single and simple; hind femora robust, simple, hind tibiæ strong, somewhat compressed inwardly and having a small angular tooth underneath near the knee, the upper edge is emarginate at some distance from the apex and the upper angle of the emargination is somewhat sharp, the apices are distinctly sharp but not mucronate, and there is an apical spur.

Female: Like the male but more densely hairy and without scales on the scutellum, elytra, and pygidial part; the two striæ between the costules of the elytra are deeper, and the latter instead of scales have a very short, erect, black pubescence; the pubescence on the pygidial part and the abdomen is often greyish white.

Length $3\frac{1}{4}$–4 mm.; width 2–$2\frac{1}{4}$ mm.

*Hab.* Cape Colony (Ceres, Stellenbosch, Worcester).

### Group SCELOPHYSIDES.

*Key to the Genera.*

A². Labrum not produced vertically.

B². Claws of all the legs double.

Clypeus deeply emarginate in the centre and with the angles very sharp, scutellum very long, all the claws double and cleft, legs slender in both sexes; clothed with scales; sexual differences not great .. .. .. .. .. .. .. .. .. *Kubousa.*

Clypeus nearly always straight at the apex in the male and with the angles sharp or rounded; scutellum short; all the claws usually double and cleft; legs slender in both sexes or not greatly developed in the male; clothed with appressed hairs; sexual differences not great:

Club of antennæ somewhat short .. .. .. .. .. *Platychelus.*
Club of antennæ long .. .. .. .. .. .. .. .. *Coega.*
Claws of hind legs single, simple .. .. .. .. .. *Idutywa.*

Clypeus with four broad reflexed teeth disposed semicircularly; claws double, hind legs slender or developed; in the male a tooth underneath the claw of the intermediate legs; clothed with scales or hairs .. .. .. .. .. .. .. .. .. *Mitrophorus.*

B¹. Claws of hind legs single.

Clypeus with the angles more or less broadly rounded; anterior and intermediate claws double or single, hind ones nearly always single and not cleft; clothed with scales; sexual differences very great; claw of the intermediate and sometimes of the hind legs with a tooth underneath in the male:

Club of antennæ small .. .. .. .. .. .. .. *Monochelus.*

Like *Monochelus*, but club of antennæ as long as all the other joints taken together; clothed with hairs .. .. *Thabina.*

Clypeus either sharply acuminate in the centre or sub-parallel with the apical angles sharp; claws single but cleft except the hind ones; sexual differences either striking or not, no tooth under the intermediate claw in the male.. .. .. .. .. *Gymnoloma.*

Clypeus plainly narrowed obliquely and deeply emarginate at the tip; legs slender in both sexes and with a tooth underneath the intermediate claw in the male, hind claws only single and simple; clothed with scales .. .. .. .. *Knysna.*

Clypeus deeply and broadly emarginate in the middle and with the two basal angles developed inwardly into a tooth; hind claws only single and simple, hind legs of male, especially the tibiæ, very swollen.. .. .. .. .. .. .. .. .. *Outeniqua.*

A¹. Labrum produced vertically.

Clypeus sub-orbicular, deeply impressed; legs slender in both sexes, all the claws simple, but the four anterior ones slightly cleft .. .. .. .. .. .. .. .. .. .. .. .. .. *Gouna.*

Clypeus slightly attenuate laterally, emarginate at the apex; hind legs of male thick, robust; all the claws double, unequal .. .. *Scelophysa.*

Clypeus sub-rectangular, not emarginate at the apex; hind legs slender in both sexes; all the claws double, unequal .. .. .. *Lepisia.*

## KUBOUSA, n. gen.

Mentum broad but a little longer than wide, rounded laterally, deeply and broadly emarginate at the tip, and not ciliate there, upper lobe of maxillæ robust, armed with six strong sharp teeth, set in a double row; palpi of *Platychelus;* antennæ nine-jointed, club as long as the five preceding joints taken together; clypeus slightly constricted laterally at the base, emarginate in front; prothorax attenuate laterally in front and sinuate or deeply sinuate in the posterior part and with the basal angles sharp, base strongly sinuate, scutellum long, sharply ogival; elytra as strongly attenuated laterally towards the apex as in *Omocrates*, plane more or less densely scaly; pygidium vertical in the male; anterior tibiæ tri-dentate outwardly, the two basal teeth are very small and all three equi-distant; but in *K. elegans* the tibiæ are only bi-dentate; legs slender, similar in both sexes, all the claws double with the more robust ones cleft.

In shape the insects included in this genus greatly resemble small species of *Omocrates*, but they are at once distinguished by the shape of the outer teeth of the anterior tibiæ which are not connate and not set at right angles with the tibiæ.

*Key to the Species.*

A². Elytra with a broad transverse impression near the humeral callus.

B². Clypeus diagonal laterally from the middle to the sharp angle of the apex and deeply emarginate.

C². Elytra with a reddish broad basal band.

Prothorax very opaque on the discoidal part and closely punctured .. .. .. .. .. .. .. .. .. .. .. *axillaris.*

Prothorax shining, impunctate on the discoidal part .. .. *venusta.*

B¹. Clypeus not attenuate laterally and with the angles rounded.

C¹. Elytra without a reddish basal band.

Prothorax opaque, finely aciculate .. .. .. .. .. .. *gentilis.*

A¹. Elytra with only the normal impression along the humeral callus.

Clypeus attenuate laterally, outer angles very sharp, apex deeply emarginate.

Prothorax and elytra covered with dense greyish scales .. .. .. *elegans.*

KUBOUSA AXILLARIS, Burm.

*Platychelus axillaris*, Handb. d. Entomol., iv., 1, p. 143.

Male: Black, shining, with the elytra transversely rufescent in the median part, along the suture of the elytra are a few sparse, whitish scales, the vertical pygidium is covered with round, nearly contiguous, flavescent scales, and the propygidium and the edges of the abdominal segments have elongated, somewhat appressed, hair-like, white scales; head scabrose, pubescent, clypeus long, slightly angular laterally at base, somewhat obliquely narrowed towards the tip which is emarginate with the angles dentate and reflexed; prothorax obliquely attenuate laterally from about the middle to the anterior part, sinuate from the median part to the base, convex, shining and with some remotely scattered punctures, fringed with somewhat stiff ciliate hairs along the anterior and lateral margins, and having along the base and also the posterior part of the lateral margin a very narrow band of white, elongate scales which are, however, rubbed off oftener than not; scutellum long, sharply triangular, elytra plane but having on each side a strongly arcuate, transverse impression near the base, shining, irregularly punctured and having in the puncture some white,

hair-like scales which are more regularly disposed along the suture, although not forming a band, they are very deeply emarginate laterally past the humeral part, greatly narrowed towards the apex, leaving a great part of the dorsal surface of the abdomen uncovered; anterior tibiæ tri-dentate, the teeth widely separated, hind legs very slender, tibiæ longer than the femora, and having a very distinct apical spur; hind tarsi nearly as long as the tibiæ; hind claws double and both cleft, inner one not quite half as long as the outer.

Female: Like the male, but the two angles of the apical part of the clypeus are not quite as much reflexed, the elytra are testaceous red from a small distance from the base right to the apex, and the legs are reddish.

Length $4\frac{1}{2}$–5 mm.; width 2–$2\frac{1}{5}$ mm.

*Hab.* Cape Colony (Stellenbosch, Paarl, Tulbagh, Malmesbury, Namaqualand).

KUBOUSA VENUSTA, n. spec.

Male: Very closely allied to *K. axillaris;* it differs in the less elongated shape of the body, which is a little broader in proportion to the length; the prothorax, instead of being opaque and very finely aciculate, is shining and either impunctate or has only a few scattered punctures in the discoidal part; the elytra are also more shiny and less closely punctate, the sub-basal red patch is often less plainly visible, and the round scales on the pygidium are bright yellow.

Female: Shape of the male, but the prothorax is more punctate, and in all my examples the elytra are red, but have a broad, basal, black band.

Length $3\frac{1}{2}$–$4\frac{1}{2}$ mm.; width $2\frac{1}{4}$–3 mm.

*Hab.* Cape Colony (Namaqualand).

KUBOUSA GENTILIS, n. spec.

Male: Æneous black, with the elytra somewhat brownish red in the anterior part, covered with small, elongate, white scales on the prothorax, and also on the elytra, pygidial part abdomen and pectus also covered with similar scales which are contiguous; head elongate, clypeus sub-parallel and with the anterior angles a little rounded, the apical part is emarginate in the centre and reflexed, club of antennæ somewhat elongate; prothorax distinctly emarginate laterally in the posterior part and with the posterior angle somewhat sharp and projecting; scutellum elongate, narrowly ogival and having a few scales; elytra elongate, very distinctly narrowed laterally towards the apex and strongly sinuate below the shoulder, thus leaving a somewhat

broad portion of the dorsal parts of the abdominal segments uncovered as in *Omocrates*, they are plane and not costulate and have a deep, transverse, basal impression between the scutellum and the humeral callus, the white scales are dense but not contiguous, except along the suture; anterior tibiæ bi-dentate outwardly, hind legs long, slender, and having only a few villose hairs and a few scales; all the claws double, unequal, slender, and all very slightly cleft.

Length $4\frac{1}{2}$ mm.; width 2 mm.

*Hab.* Cape Colony (Cape Town, Malmesbury).

KUBOUSA ELEGANS, n. spec.

Male: Black, with the tarsi rufescent, covered on the upper side with small and dense but not quite contiguous greyish white slightly hair-like scales, and on the pygidial part, abdomen and metasternum with thicker and broader silvery-white ones; clypeus a little rounded laterally near the base, and sub-diagonally attenuated towards the apex which is very deeply emarginate in the centre, and the angles of which are very sharp, and somewhat reflexed; head and prothorax finely shagreened, the latter is plainly sinuate laterally in the posterior part and sharply angular at the base, and has a small impression along the base on each side of the median part, the scales leave a median longitudinal denuded band, and it is ciliate in front, and laterally; scutellum elongate, ogival; elytra strongly sinuate laterally and very plainly attenuate thence towards the apex, the scales are denser than on the prothorax, but not quite contiguous, they are very faintly costulate on each side, and they have a distinct longitudinal basal impression along the humeral callus; fore tibiæ tri-dentate, but with the basal tooth very small; claws double, unequal, the stronger ones cleft.

Female: Like the male in size, shape, and vestiture, but the scales are a little more flavescent, and those on the pygidium a little more hair-like.

Length $3\frac{1}{2}$–5 mm.; width $2\frac{1}{4}$–$2\frac{4}{5}$ mm.

*Hab.* Cape Colony (Namaqualand).

GEN. PLATYCHELUS, Burm.,
Handb. d. Entomol., iv., 1, p. 141.
*Encyophanes*, Burm., ibid., p. 139.

Mentum somewhat elongate, ovate, deeply constricted at the point of insertion of the labial palpi, nearly straight or very little sinuate

at the tip the angles of which are obliquely attenuate and penicillate; upper maxillary lobe horny and with a long pencil of hairs at the top, broad, concave, armed with six strong teeth set opposite each other, apical joint of maxillary and labial palpi swollen at the base, fusiform; clypeus slightly attenuate laterally towards the apex, or rectangular, straight at the tip, with the angles sometimes sharp or slightly reflexed; prothorax convex, narrowed laterally in the anterior part; scutellum short, triangular; elytra elongate, somewhat plane, slightly or strongly sinuate laterally below the humeral part, and attenuate from there to the apex; pygidium declivous forwards in the male; legs moderately slender, hind legs generally similar in both sexes, with the exception of *P. pugionatus*, *P. excentrus*, *P. dispar;* anterior tibiæ bi- or tri-dentate outwardly; all the claws double and cleft (except in *P. cicatrix*), but the smaller one of the hind feet is sometimes simple.

By restricting to this genus all the species with the clypeus transversely straight at apex, we have a very homogeneous group of insects, the livery of which consists of hairs, not of scales; in the elytra, however, these appressed hairs are somewhat squamose along the posterior part of the suture and on the apical margin.

The habits are those of *Heterochelus*, and some species have a facies which is not unlike that of certain species of the latter. *P. semivirgatus*, &c., have the two basal outer teeth of the fore tibiæ nearly connate, and therefore resembling those of *Heterochelus;* the trochanters are developed into a long spine, and the hind tibiæ into a long mucro in *P. pugionatus*, or the hind tibiæ are triangularly dilated, and the apices sub-mucronate in the males of *P. excentrus* or *P. dispar*. The maxillæ are, however, much more robust and more powerfully dentate inwardly in *Platychelus*, the apical outer tooth of the anterior tibiæ is always very oblique, and the hind legs have always a long inner apical spur.

I am not aware of the genus being represented elsewhere than in South Africa.

### *Key to the Species.*

A². Hind trochanters produced into a long spine in the male.

Metallic, glittering, elytra light chestnut-brown, under side and legs clothed with dense yellow hairs .. .. .. .. .. .. *pugionatus.*

A¹. Hind trochanters not spinose.

B². Elytra without deep longitudinal impressions or without costules.

C². Anterior tibiæ bi-dentate outwardly.

$a^2$. Clypeus straight, with the angles sharp, elytra moderately elongate, and having in the posterior part a faint juxta-sutural band of sparse greyish hairs; hind tarsi not villose:

Elytra testaceous, and with a lateral and apical infuscate band .. .. .. .. .. .. .. *dimidiatus.*

Elytra æneous and with a broad basal testaceous band .. .. .. .. .. .. .. .. .. *basalis.*

Elytra æneous and with a faint, sub-basal brownish band .. .. .. .. .. .. .. *gentilis.*

$a^1$. Clypeus slightly rounded laterally, and somewhat emarginate; elytra moderately elongate and without a juxta-sutural band of hairs:

Clypeus a little attenuate laterally and with the angles rounded; elytra æneous with a large yellow basal patch on each side; hind tarsi not particularly villose .. .. .. .. .. .. *anomalus.*

Clypeus attenuate laterally and slightly angular; elytra testaceous yellow, slightly æneous at apex; hind tarsi very densely villose .. .. .. .. *brevis.*

$C^1$. Anterior tibiæ tri-dentate.

Elytra short, testaceous red, and having on each side a diagonal impressed line reaching from the scutellum to the outer margin; hind tarsi very densely villose .. *cicatrix.*

Elytra normal, short, testaceous red; hind tarsi not villose .. .. .. .. .. .. .. .. .. .. .. *karrooensis.*

Elytra normal, short, with the humeral part not sloping, black .. .. .. .. .. .. .. .. .. .. .. *expansus.*

Elytra very elongate, light testaceous; pygidium briefly clothed with greyish hairs.. .. .. .. .. .. .. *lupinus.*

Elytra elongate, light testaceous; pygidium clothed with conspicuously dense fulvous hairs .. .. .. .. .. *pyropygus.*

$B^1$. Elytra with two or three longitudinal impressions on each side, and costulate.

$C^2$. Anterior tibiæ tri-dentate.

$D^2$. The two basal teeth sub-connate.

$a^3$. Elytra with three not interrupted bands of greyish hairs on each side.

Clypeus straight, sub-angular laterally; inner claw of anterior tibiæ very thick .. .. .. *gravidus.*

$a^2$. Elytra with two interrupted bands of hairs on each side.

Clypeus tri-dentate; hind claw cleft on the side .. .. .. .. .. .. .. .. .. .. .. *virgatus.*

Clypeus sharply angular laterally and with the median part of the apical margin slightly raised; hind claw cleft at the tip .. .. .. .. .. *semivirgatus.*

Clypeus straight, normally angular; larger hind claw cleft laterally.. .. .. .. .. .. .. *hottentotus.*

Clypeus very sharply angular laterally, the angle reflexed; larger hind claw cleft at the tip for nearly the whole length.. .. .. .. .. *unguiculatus.*

$a^1$. Elytra without interrupted bands of hair.

Clypeus straight with the angles sharp and reflexed; hind claw slightly cleft laterally, smaller one simple .. .. .. .. .. .. *conformis.*

$D^1$. Anterior tibiæ tri-dentate, the two basal teeth not connate.

Clypeus straight, but with the angles slightly rounded in both sexes; elytra of the male fuscous, of the female red.. .. .. .. .. .. .. .. *discolor.*

Clypeus of the male slightly emarginate in the centre, and distinctly angular laterally but not reflexed; prothorax very closely punctured in the posterior part .. .. .. .. .. .. .. .. *litigosus.*

Clypeus with the outer angles sharp and reflexed; prothorax with broader and less closely set punctures .. .. .. .. .. .. .. .. .. .. *nitidulus.*

Clypeus rounded laterally; elytra plainly bi-costate and covered with bristle-like whitish, scattered appressed hairs .. .. .. .. .. .. .. .. *retensus.*

$C^1$. Anterior tibiæ bi-dentate.

Clypeus straight, sharply angular; elytra red, sparsely punctate on the intervals.. .. .. .. .. .. .. *glabripennis.*

Clypeus nearly straight, but with the angles rounded in the male, sub-orbicular in the female; elytra very closely punctured .. .. .. .. .. .. .. .. *hoplioides.*

Clypeus sub-orbicular in the male; elytra very closely punctured .. .. .. .. .. .. .. .. .. .. *caffer.*

Clypeus quite rounded in front (♀); elytra covered with minute, not closely set granules .. .. .. .. *jucundus.*

Clypeus sub-orbicular in the male; elytra very closely punctured and having two patches of white hairs on each side .. .. .. .. .. .. .. .. .. .. *excentrus.*

Clypeus straight and angular on each side; elytra clothed with short, appressed fuscous hairs .. .. *dispar.*

PLATYCHELUS PUGIONATUS, n. spec.

Male: Æneous, shining, elytra light chestnut-brown, and clothed on the prothorax, the pygidial part, the under side and legs, with very long and dense light fulvous hairs; head and clypeus granular, clypeus straight laterally, transverse but slightly emarginate in front, and with the angles sharp but not projecting, the anterior margin is reflexed; prothorax plainly scabroso-punctate in the anterior half, normally punctate in the posterior, and having a short, shallow, basal longitudinal furrow; scutellum moderately short, triangular, clothed with fulvous hairs; elytra not very deeply sinuate laterally but plainly narrowed towards the apex, faintly bi-costulate on each side, but having there two longitudinal impressions, they are irregularly punctulate, and nearly glabrous; pygidium almost sub-horizontally declivous forwards; anterior tibiæ bi-dentate outwardly, hind femora robust and having the trochanters produced into a very long sub-vertical spine, hind tibiæ slender in proportion to the size of the femora, somewhat flattened underneath, slightly curved and ending in a very long, spinose, outer mucro, no apical spur; claws double, unequal, the stronger one somewhat slender.

Female unknown.

This is the only *Platychelus* having spinose trochanters.

Length 5 mm.; width 3 mm.

*Hab.* Cape Colony (Namaqualand).

PLATYCHELUS DIMIDIATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 146.

Head and prothorax shining bronze; legs and under side metallic black, shining; elytra light testaceous, somewhat broadly infuscate laterally in the male, but not in the female, pygidium with a few small greyish appressed hairs in the male, densely hairy with the hairs yellow in the female; head very scabrose; clypeus straight, somewhat bluntly angular laterally and covered like the prothorax with a villose greyish pubescence; prothorax deeply scabroso-punctate; scutellum with greyish villose hairs; elytra slightly impressed longitudinally along the suture, but not costulate, deeply and closely punctured, briefly pubescent and having on each side a faint discoidal band of greyish white hairs somewhat remote, and a short and more distinct one along the suture in the posterior part; propygidium and abdominal segments covered with dense whitish squamose hairs, pectus villose; hind legs normal, hind claws slender, anterior tibiæ bi-dentate.

Length 6–6½ mm. ; width 3¼ mm.

*Hab.* Cape Colony (Namaqualand).

Platychelus basalis, n. spec.

Like the preceding species, but much less hairy, the vestiture of the pygidial part and of the abdomen is similar ; the elytra are of the same shining bronze colour as the head and prothorax, but the whole basal part is testaceous with a metallic tinge, and there is no trace of the bands of greyish-white hairs ; legs similar.

Length 6 mm. ; width 3¼ mm.

*Hab.* Cape Colony (Tulbagh, Ceres, Cape Town, Stellenbosch).

Platychelus gentilis, n. spec.

Similar in shape and size to the two previous species, but at once distinguished by the elytra which are a little more costulate on the discoidal part, the head and prothorax are bronze-green, the elytra are slightly rufescent along the base in the male, but not in the female, and are dark bronze for the greatest part of the length, the pubescence of the prothorax and elytra is much shorter than in *P. dimidiatus*, but the bands of whitish hairs are similar, the scutellum, propygidium, and abdomen are clothed with dense, squamose, slightly flavescent hairs, which in the female are less squamose and more yellow ; legs as in the preceding species.

Length 5½ mm. ; width 3–3¼ mm.

*Hab.* Cape Colony (Stellenbosch).

Platychelus anomalus, Burm.,
Handb. d. Etomol., iv., 1, p. 150.

Male : Bronze, more shining on the prothorax than in the posterior part of the elytra, the anterior part of the latter being occupied by a transverse testaceous yellow patch reaching to near the outer margin and to the suture ; clypeus very rugose, plainly rounded laterally and slightly emarginate in the centre ; prothorax clothed with an erect greyish pubescence which is somewhat bristly, it is closely scabroso-punctate in the anterior part, but normally punctate in the posterior ; scutellum with a greyish pubescence ; elytra very plane, distinctly emarginate and narrowed laterally, covered with broad, somewhat closely set punctures, and covered with a very short, fuscous appressed pubescence ; propygidium, pygidium, and abdomen clothed with greyish hairs ; hind legs slender.

Length 5 mm. ; width 3 mm.

*Hab.* Cape Colony (no exact locality recorded).

PLATYCHELUS BREVIS, Burm.,
Handb. d. Entomol., iv., 1, p. 152.

Male: This species is also very closely allied to *P. dimidiatus*, so much so that it is difficult to differentiate them; it is, however, a little smaller, the pubescence on the prothorax is somewhat denser and more flavescent; the elytra of the male are fuscous in the posterior part only, not on the sides, the pygidium is much more densely covered with flavescent hairs; the hind tarsi, and also the hind tibiæ, but the former especially, are very densely villose, the villose hairs on the tibiæ are yellow, and on the tarsi black.

The female cannot be distinguished from that of *P. dimidiatus*.

Length 5 mm.; width 3 mm.

*Hab.* Cape Colony (Namaqualand)

PLATYCHELUS CICATRIX, Burm.,
Handb. d. Entomol., iv., 1, p. 144.

Male: Head, prothorax, and legs bronze, shining, under side black with a metallic tinge, elytra reddish brown; head granular, setulose, clypeus straight at the tip, and with the angles well defined, but slightly rounded; prothorax convex, covered with deep, not very closely set punctures, densely villose, the villosity long and flavescent, no median longitudinal sulcus; scutellum covered with whitish, thick, squamose hairs; elytra very distinctly attenuate laterally towards the apex and very sinuate below the shoulder, not costulate, but having near the base a conspicuous obliquely transverse impressed line reaching on each side from the scutellum to the outer margin close to the shoulder, they are closely punctured, clothed with very dense but very short, erect, slightly flavescent hairs, and have in the centre of the disk a small fascicle of white hairs, and another one, close to the suture and adjoining the transverse oblique impressed line; pygidial part and abdomen clothed with dense, contiguous white scales, the pygidium has also a fringe of greyish ciliæ all round, the abdomen is entirely covered with thick, squamose hairs, and the pectus is clothed with dense, greyish-white, villose hairs; the hind legs, and especially the tarsi, are very densely villose, with the hairs rufescent, but black on the tarsi; hind claws double and not cleft, the inner one is more than half the length of the outer, which is not thickened; anterior tibiæ tri-dentate.

Female: Similar to the male, but the scales on the pygidial part and abdomen are a little more flavescent.

Length 5 mm.; width $2\frac{1}{2}$ mm.

*Hab.* Cape Colony (Namaqualand).

PLATYCHELUS KARROOENSIS, n. spec.

Male: Bronze, somewhat greenish on the prothorax; elytra testaceous red, very shiny, but with scarcely a metallic sheen; clypeus straight at apex, slightly attenuate laterally and with the outer angles distinct, the head is very granulose, and slightly pubescent; prothorax very closely scabroso-punctate laterally and in the anterior part, but with normal, somewhat closely set punctures in the median part, very slightly grooved longitudinally in the anterior part only, and clothed with a dense greyish and subflavescent, long pubescence; scutellum covered with thick flavous hairs; elytra plainly sinuate and narrowed laterally towards the apex, very plane, not costulate, but having a somewhat distinct, although very shallow impression along the suture, they are very closely punctured, and covered with a very short, appressed, slightly fuscous pubescence; pygidial part and abdomen clothed with a very dense, thick yellowish pubescence; the legs are pubescent, but not the hind tarsi; all the claws are cleft, and the anterior tibiæ are distinctly tri-dentate.

Length 5½–6 mm.; width 3–3½ mm.

This species is distinguished from *P. dimidiatus* and *P. brevis*, both of which it closely resembles, by the tri-dentate anterior tibiæ, and also from the last-named species by the non-densely villose hind tarsi.

*Hab.* Cape Colony (Worcester).

PLATYCHELUS EXPANSUS, n. spec.

Male: Black, with a dark green metallic tinge on the prothorax; head and prothorax clothed with a fulvous erect, somewhat villose pubescence; clypeus normal in shape; prothorax with a posterior short and shallow median groove, scutellum, propygidium, and pygidium clothed with dense appressed fulvous hairs; the elytra are broader than in *P. dimidiatus* and *P. brevis*, and being not longer than in the latter species, they look more ampliated at the base, the longitudinal impression near the humeral callus is distinct, but there is only a slightly transverse impression below the scutellum, they are very closely punctured, are covered with a very short, erect black pubescence, and have no trace of appressed greyish hairs; hind legs clothed with a fulvous, not very dense pubescence.

Female unknown.

Length 5 mm.; width 3 mm.

*Hab.* Cape Colony (Pella).

This species resembles also *P. karrooensis*, but owing to the

shoulders being straight instead of oblique, the elytra are broader at the base and look shorter in proportion to the size.

PLATYCHELUS LUPINUS, Burm.,
Handb. d. Entomol., iv., 1, p. 146.

Male: Elongate, black with a bronze tinge, elytra very light testaceous, slightly infuscate in the apical part; head and prothorax clothed with a very long, villose, light fulvous pubescence, which is nearly equally as long and dense on the abdomen and the pectus; the punctures on the prothorax are not scabrose in the posterior half, and there is no median groove; scutellum densely hairy; elytra elongate, conspicuously emarginate laterally and strongly attenuate towards the apex, nearly plane but having a deep transverse impression in the basal part, and a slight depression along the suture, they are covered with somewhat closely set, round, somewhat seriate punctures, each bearing a fine sub-appressed, pallid hair, at the apex of the suture there is a short band of denser paler hairs on each side; pygidium somewhat convex, very closely and very finely punctulate, and covered with a slight pallid pubescence which does not conceal the black background; anterior tibiæ with a somewhat indistinct third outer tooth; hind legs slender, villose, the hind inner claws are two-thirds of the length of the outer, and both distinctly cleft at tip.

Female: Similar to the male, but the elytra are not infuscate behind, and the third basal tooth of the anterior tibiæ is, although very small, sharper and more distinct.

Length 7–8 mm.; width $3\frac{1}{4}$–4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury, Worcester).

This species is easily distinguished from the preceding ones by the more elongated shape.

PLATYCHELUS PYROPYGUS, Burm.,
Handb. d. Entomol., iv., 1, p. 147.

This species might be mistaken for *P. lupinus*, and I am not sure that it is not merely a variety; it is, however, smaller, and the pubescence on the prothorax, under side, and legs is greyish white, but the propygidium and pygidium are clothed with very dense orange-yellow appressed hairs; the prothorax is also more shining bronze, but occasionally the hairs on the prothorax and under side are as fulvous as in *P. lupinus*, in which case the only distinctive character is the background of the scutellum entirely hidden by the

thickly appressed orange hairs; anterior tibiæ with a third, very small basal tooth.

Female exactly like the male.

Length 6–6¼ mm.; width 3–3¼ mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury).

PLATYCHELUS (ENCYOPHANES) GRAVIDUS, Burm.,
Handb. d. Entomol., iv., 1, p. 140.

Male: Black, prothorax clothed with a dense flavescent or whitish, slightly lanuginose pubescence; elytra with four bands of appressed, squamulose hairs of the same colour, pygidium and abdomen clothed with similar hairs, pectus and legs densely hairy; head and prothorax scabrose, the clypeus is straight laterally and also at apex; the outer angles are very distinct, and the apical margin is plainly reflexed; scutellum hairy; elytra very little broader than the prothorax at the base but very plainly narrowed laterally from the shoulder towards the apex, they are very closely punctured and have on each side two somewhat distinct costules, and three intervals filled with the appressed, squamose hairs in addition to the outer marginal band, but the third one is often obliterated, or very indistinct; pygidium large and very slanting forwards, being almost sub-horizontal; hind legs moderately robust, hind tibiæ sub-mucronate inwardly at apex and having an apical spur, anterior tibiæ strongly tri-dentate with the two basal teeth closely set but not connate, and the basal one shorter, but broader than the intermediate; all the claws are double and unequal, the anterior ones are both cleft, the inner one of the anterior being short and very massive and less deeply cleft than the other, in the intermediate and posterior legs the weaker claw is very small and simple, and the stronger, and somewhat elongate one, is deeply cleft.

Female: I have not seen the female, but Burmeister says that she is smaller, narrower, and darker than the male; the fore margin of the clypeus is not much raised, and the squamose hairs are not so dense.

Length 8–10 mm.; width 4½–5½ mm.

*Hab.* Cape Colony (exact locality unknown); Natal (Frere).

PLATYCHELUS SEMIVIRGATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 148.

Male: Black, with an æneous sheen more noticeable on the sides of the elytra and on the legs; head and prothorax clothed with a

long greyish erect pubescence; elytra with a distinct sutural and apical band of white, appressed, slightly squamulose hairs obliterated close to the apex of the scutellum, there is also a faint trace of a discoidal and of a supra-marginal line of similar hairs; the pygidial part and abdomen are covered with appressed hairs more flavescent on the pygidium than on the abdomen; clypeus very scabrose, slightly attenuate laterally, straight at the apex with the angles sharp and reflexed, and a slight prominence in the centre of the reflexed margin; prothorax very closely scabrose except on the median basal part, which is punctured, it has a distinct median longitudinal groove; scutellum densely hairy; elytra very plainly sinuate laterally and attenuate towards the apex, irregularly and somewhat closely punctured, not costulate but having two longitudinal impressions; anterior tibiæ tri-dentate, the apical tooth is very slanting, but the other two, although not quite connate at the base, are set at right angles somewhat in the fashion of *Heterochelus*, among which this species should be placed but for the stronger hind claw being deeply cleft at the tip.

Female: Exactly like the male, but a little more robust; it can be distinguished by the shape of the pygidium only.

Length 5–7½ mm.; width 3–3½ mm.

*Hab.* Cape Colony (Worcester, Namaqualand, Graham's Town).

PLATYCHELUS VIRGATUS, Burm.,
Handb. d. Entomol, iv., 1, 148.

Male: Black, with a very faint metallic tinge; prothorax clothed with a moderately short, dense greyish pubescence; scutellum hairy, elytra with three moderately distinct bands of appressed greyish hairs, the median one of which is obliterated past the middle; pygidial part, abdomen and legs clothed with appressed hairs flavescent on the pygidium, greyish elsewhere; head finely scabrose, clypeus slightly attenuate laterally, plainly tri-dentate at apex and with the teeth reflexed; the prothorax is finely scabrose all over; scutellum clothed with greyish hairs; elytra plainly sinuate laterally and attenuate towards the apex, bi-impressed longitudinally on each side, the juxta-humeral impression being deeper but shorter than the sutural one, they are closely but irregularly punctured and somewhat brownish laterally, and they have a few ashy grey hairs in the intervals of the hairy bands; anterior tibiæ tri-dentate, but with the basal one much shorter than the intermediate, the two, however, are set close to each other and almost at right angles with the tibiæ; the robust hind claw is cleft laterally,

and the weaker one is very small in one of my examples but normal in the other; in the latter the hind tibiæ are also plainly mucronate underneath at apex.

There is a little discrepancy between this description and that of Burmeister, who says that the clypeus is quadri-dentate, and the teeth of the anterior tibiæ very obtuse. The first might be a *lapsus calami*, the other an accident. My example was labelled by Drège under this name. This species resembles *P. semivirgatus*, but the head is more finely granulose, and the prothorax is equally and also more finely scabrose right to the base; the shape of the clypeus is also different, being plainly tri-dentate. This last feature gives it also the appearance of a species of *Goniaspidius*, from which, however, it is distinguished by the short, obtusely triangular scutellum.

Length $5\frac{1}{2}$ mm.; width $3\frac{1}{4}$ mm.

*Hab.* Cape Colony (Graham's Town).

### Platychelus unguiculatus, n. spec.

Black, with the elytra and legs red, shining; head and prothorax clothed with villose sub-flavescent hairs; elytra moderately densely pubescent; the pubescence is somewhat greyish, but along the suture and the apical margin there is a band of denser and longer white hairs turning to yellow on the apical margin; pygidium clothed with very dense, appressed flavescent squamose hairs; clypeus sharply angular laterally, head and prothorax closely scabrose; scutellum clothed with long, dense white hairs; the elytra are punctate, impressed longitudinally along the humeral callus; the propygidium, abdomen, pectus, and legs are clothed with greyish or white hairs; the anterior tibiæ are strongly tri-dentate outwardly, the teeth are very sharp, and the apical one is broadly separated from the other two, which are nearly connate; the hind claws are double and deeply cleft, the two parts of the fissured inner claw which is cleft to beyond the median part being equal in length and nearly so in thickness. The two sexes are alike.

In no other species of the group to which *P. unguiculatus* belongs is the cleavage of the inner claw so greatly developed.

Length 5–$6\frac{1}{4}$ mm.; width 3–$3\frac{1}{4}$ mm.

*Hab.* Cape Colony (Worcester).

### Platychelus hottentotus, n. spec.

Shape and sculpture of *P. unguiculatus*, but somewhat more robust; the shape of the clypeus is the same, the prothorax is

somewhat metallic green, but the elytra have not only along the suture a broad band of very dense and somewhat long, lanceolate appressed white hairs, but the long impression along the humeral callus is filled with a band of similar hairs; the scutellum is densely hairy, and the hairs white; the appressed hairs on the pygidium are white in both sexes; the anterior tibiæ are strongly and sharply tri-dentate, the apical tooth is also broadly separated from the intermediate one, and the hind claws are double and both parts cleft, but the longer one is only cleft laterally, and the lateral part is slender and shorter.

Length 6–9 mm.; width 3–4 mm.

*Hab.* Cape Colony (Namaqualand).

PLATYCHELUS CONFORMIS, n. spec.

A close ally to *P. hottentotus*, but much smaller; the elytra are darker brown; the head and prothorax are similar, the latter being more distinctly dark green, but the pubescence which covers it is much shorter; the scutellum is also hairy, but the hairs are greyish, and the elytra have no longitudinal impression along the suture or the humeral callus, and are covered equally with greyish appressed hairs not as dense as on the pygidial area, abdomen, or pectus, where they are flavescent; anterior tibiæ tri-dentate, the teeth are sharp and shaped as in *P. hottentotus*, and the hind claws are cleft in the same manner, but the lateral cleft part of the outer one is very slender.

The female is not known.

Length 4–4¼ mm.; width 2 mm.

*Hab.* Cape Colony (Pella, Namaqualand).

PLATYCHELUS DISCOLOR, Burm.,
Handb. d. Entomol., iv., 1, p. 148.

Male: Bronze, shining, darker on the elytra than on the prothorax; head and prothorax clothed with a moderately long, dense, subflavescent pubescence, elytra moderately densely pubescent along the margin, and in the basal discoidal impression; pygidial part, abdomen, and legs clothed with dense, yellow, appressed hairs; head finely scabrose; clypeus not narrowed laterally, straight at apex but with the angles slightly rounded; prothorax finely scabrose, but with the posterior median part punctate; scutellum clothed with greyish white hairs; elytra deeply sinuate and moderately attenuate laterally towards the apex, impressed along the suture in the median

part, and having a short, discoidal impression along the humeral callus, they are closely punctate, and very slightly pubescent, the pubescence is denser along the suture; anterior tibiæ tri-dentate, the teeth are equi-distant, but the basal one is small.

Female: Shape of the male, but the elytra are red, the prothorax greener, and the pubescence on it is not as long as in the male, the appressed hairs are more evenly spread and do not form a band along the suture; the legs are piceous red. Some of the females have partly fuscous elytra.

Length 5–5¼ mm.; width 2⅕–3 mm.

*Hab.* Cape Colony (Port Elizabeth, Uitenhage).

PLATYCHELUS LITIGOSUS, Burm.,
Handb. d. Entomol., iv., 1, p. 149.

*P. cinereus*, Blanch., Catal. Coll. Entom., p. 64.

Very closely allied to *P. discolor;* the male has also the elytra æneo-fuscate, and redder along the sides, and in the female the elytra are brownish red; the only difference is to be found in the shape of the clypeus which in the male is straight at apex with the angles sharp and plainly reflexed, while in the female these angles are more rounded than in *P. discolor*.

Length 6½–7 mm.; width 3½–4 mm.

*Hab.* Cape Colony (Graham's Town).

PLATYCHELUS NITIDULUS, Burm.,
Handb. d. Entomol., iv., 1, p. 149.

Male: Quite similar in general facies to *P. semi-virgatus*, but much smaller; the colour and sculpture are alike, the prothorax especially is very metallic; in the male the clypeus is sharp laterally and has a very slight prominence in the centre; the elytra have the same vestiture, the pygidial part is equally hairy, and the only difference between the two species is to be found in the shape of the two basal teeth of the anterior tibiæ which in *P. nitidulus* are separate, whereas in *P. semi-virgatus* these are set very close to each other, almost connate.

Length 4–4¼ mm.; width 2½ mm.

*Hab.* Cape Colony (Cape Town).

PLATYCHELUS RETENSUS, n. spec.

Male: Dark bronze, a little more shiny on the prothorax than on the rest of the body; clypeus very rugose, straight laterally and

with the angles broadly rounded, head covered with large, non-contiguous granules; prothorax clothed with a somewhat dense, sub-erect pubescence, it has small granules not closely set along the anterior margin and also on the anterior part of the sides, but the remainder of the surface is extremely finely aciculate, and in the median part of the disk only are there a few broad, scattered punctures, and there is a median longitudinal groove deeper and plainer in the posterior part; scutellum slightly pubescent; elytra elongate, emarginate laterally, but only slightly attenuate towards the apex, bi-costulate on each side, and having some deep, somewhat irregularly scattered punctures bearing each an appressed, long, bristle-like white hair; pygidial part and abdomen not very densely pubescent; anterior tibiæ tri-dentate but with the basal tooth very minute, all the claws are double and cleft, and less compressed against each other than in the other species of the genus, hind femora robust, hind tibiæ shorter than the thigh, plainly dilated triangularly towards the tip, but not mucronate there.

Length 6½ mm.; width 3 mm.

Unlike the other species of the genus, the hairs on the elytra are almost bristle-like, although appressed; the granules on the head are also fewer and larger.

*Hab.* Cape Colony (Worcester).

PLATYCHELUS GLABRIPENNIS, Burm.,

Handb. d. Entomol., iv., 1, p. 153.

Male: Shape and size of *P. hoplioides* which it closely resembles; black, with a slight metallic tinge; the head is also scabrose, but the clypeus is a little attenuate laterally towards the apex which is straight with the margin reflexed and the outer angles sharp; the prothorax, pygidial part, abdomen, pectus, and legs are clothed with a very long and very dense yellow pubescence; the elytra are brick-red, somewhat shining, not distinctly costulate, but having instead of scabrose, closely set punctures, irregularly scattered round ones, more distinct and somewhat seriate in the dorsal intervals, and along the outer margin; anterior tibiæ bi-dentate outwardly; posterior legs of male, robust, hind tibiæ plainly dilated towards the apex, spinose on each side at the tip and with the apical spur small but distinct.

Length 9 mm.; width 4¾ mm.

*Hab.* Cape Colony (exact locality not recorded).

PLATYCHELUS HOPLIOIDES, Burm.,

Handb. d. Entomol., iv., 1, p. 151.

Male: Black, with a faint æneous tinge, elytra either fuscous, dark chestnut, or reddish brown, but with a slight metallic tinge, clypeus straight at the apex but with the outer angles slightly rounded; head granulose; prothorax very closely scabrose except in the median posterior part, where the punctures are rounder and clothed with a very dense, slightly flavescent, or sometimes fulvous, erect pubescence; scutellum clothed with a long, appressed pubescence; elytra faintly bi-striate on each side, covered with very closely set scabose punctures each bearing an appressed greyish hair forming a dense pubescence; pygidial part and abdomen also similarly punctured and equally pubescent; pectus villose; anterior tibiæ bi-dentate outwardly, all the claws double, unequal, and cleft.

Female: Like the male, and only recognisable by the shape of the pygidium which is a little convex, and vertical; generally the appressed pubescence on the elytra is not quite so dense as in the male, and the clypeus is parabolic.

Length 7–10 mm.; width $3\frac{1}{2}$–$5\frac{1}{2}$ mm.

I never found this species on flowers, but always dragging itself on the ground.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Malmesbury).

PLATYCHELUS CAFFER, Bohem.,

Insect. Caffrar., ii., p. 155.

Male: Black, with a faint metallic tinge plainer on the prothorax, and moderately shining; elytra with a faint brownish tinge; clypeus a little attenuate laterally and much rounded, almost orbicular, the margin is a little reflexed, it is, like the head, very rugose, and the latter is hairy; prothorax scabrose in the interior part and sides, punctate in the discoidal posterior part, densely pubescent, the pubescence long, erect, and greyish; elytra normally sinuate and attenuate laterally, bi-impressed longitudinally on each side, deeply and somewhat closely punctate and clothed with an equal, somewhat dense fuscous pubescence; pygidial part, abdomen, pectus, and hind legs clothed with a similar pubescence which is not, however, very dense; anterior legs bi-dentate. Boheman states that the anterior tibiæ are tri-dentate, but in his type, as also in my co-type, they are as mentioned above.

Length $5\frac{1}{2}$ mm.; width $2\frac{1}{2}$ mm.

*Hab.* Cape Colony (exact locality unknown). Boheman mentions the Orange River region as the habitat of the species.

### PLATYCHELUS JUCUNDUS, n. spec.

Female: Greenish bronze, brighter on the prothorax; head, prothorax, pygidial part, abdomen, pectus, and legs clothed with a long and dense greyish pubescence which is erect on the head and prothorax; clypeus nearly parabolic; the sculpture of the head and prothorax is similar to that of *P. hoplioides* or *P. glabripennis*, but the pubescence is longer; scutellum also pubescent; elytra not costulate, but having a deep, basal, longitudinal impression alongside the humeral callus, and a shallow one along the median part of the suture, the surface is extremely finely and closely aciculate, and instead of scabrose punctures they are covered with closely set, equidistant, small granules from the intervals of which spring small, appressed, greyish hair; anterior tibiæ strongly bi-dentate, but having also a third, very small basal tooth.

Length $9\frac{1}{4}$ mm.; width 5 mm.

*Hab.* Cape Colony (Malmesbury).

### PLATYCHELUS EXCENTRUS, n. spec.

Male: Black, with the elytra reddish brown; head very closely scabroso-punctate, clypeus with the lateral angles much rounded, sub-parabolic in the male, club of antennæ reddish brown; prothorax clothed with very dense and very long villose hairs, black in the anterior part, greyish white in the posterior, it is distinctly convex and has a well-defined median longitudinal sulcus in the posterior part; elytra slightly impressed longitudinally along the suture and deeply along the humeral callus, the two impressions being divided by a not much raised costule; they are clothed with sub-appressed black hairs, but along the base there is a fringe of long, white hairs, a patch of these in the discoidal impression, and a more elongate one along the suture, at about the median part; the pygidial part, abdomen, and pectus are clothed with greyish white, dense, villose hairs, and the legs with black ones; the anterior tibiæ are bi-dentate, the basal tooth is not sharp, and is more or less angular; the hind femora are robust, and the hind tibiæ are triangularly dilated towards the tip where the apices are very sharp, the lower one being mucronate; there is an apical spur.

Length $7\frac{1}{2}$–9 mm.; width $3\frac{1}{2}$–$4\frac{1}{2}$ mm.

*Hab.* Cape Colony (Namaqualand).

PLATYCHELUS DISPAR, Burm.,
Handb. d. Entomol., iv., 1, p. 153.

Male: Black, with the elytra brownish red; clothed on the prothorax, under side and legs with a very dense ashy-grey pubescence. Similar in shape and sculpture to the preceding species, but the head is a little more coarsely granulose, and the clypeus, instead of being parabolic, is straight at the apex with the angles sharp; the prothorax is plainly grooved longitudinally; the elytra have a short but deep, basal, supra-humeral impression, and are slightly impressed longitudinally along the median part of the suture, they are moderately closely punctured, each puncture bearing an appressed short blackish hair; the anterior tibiæ are bi-dentate outwardly, the hind femora are robust, and the tibiæ dilated triangularly towards the apex the two angles of which are greatly developed, the inner one being plainly mucronate, there is a long apical spur.

Female unknown. Resembles somewhat *P. excentrus*, but is distinguished by the straight clypeus, the much less densely punctured elytra; the hind tibiæ are not quite as plainly mucronate as Burmeister states, and resemble those of *P. glabratus, hoplioides*, and *excentrus*.

Length $6\frac{1}{2}$ mm.; width $2\frac{1}{4}$ mm.

*Hab.* Cape Colony. This description is made from one of Drège's specimens.

(*Species which I have not seen or been able to identify.*)

"*Anterior margin of clypeus reflexed, sharp laterally; anterior tibiæ long, narrow, tri-dentate outwardly, legs long and slender, claws normally long.*

*Scutellum very small, rounded, the whole surface of the body densely covered with scales.*

PLATYCHELUS SQUAMOSUS, Burm.,
Handb. d. Entomol., iv., 1, p. 143.

"Fuscous, legs rufous, whole body with ashy-grey or fulvous scales.

Length 2 lin.

From Mr. Drège. Margin of clypeus reflexed in front in both sexes, a little raised in the middle, but with the angles more raised, black, scabroso-punctate, head with grey hairs; antennæ

red with the club and also the palpi black; frontal part, prothorax, scutellum, elytra and the whole under side similarly clothed in both sexes with small, closely set scales, narrower and white underneath, orange-yellow above in the male, and greyish green in the female; legs brownish red with the hairs greyish, the teeth of the anterior tibiæ are longer in the female; prothorax with sparse long black setæ, white in the posterior edge."

"*Scutellum large, triangular; anterior tibiæ bi-dentate.*

PLATYCHELUS MELANURUS,
Ibid., p. 145.

"Black, shining, hairy, elytra pale testaceous, black at apex.

Length $1\frac{1}{4}$ lin. ♂ ♀.

From Mr. Drège. Black, shining, with long hairs, the hairs on the sides of the abdomen white; head thickly punctate, the apical margin raised in the middle and very sharp laterally in the male; prothorax with rugose, sparse punctures, and having long hairs; scutellum also punctate, but having short hairs; elytra testaceous, those of the male convex and infuscate at the apex; pygidial part and legs also brown and clothed with greyish hairs; antennæ entirely black, the club longer in the male than in the female."

PLATYCHELUS SEMIHIRTUS, Burm.,
Ibid., p. 145.

"Black, shining, hairy; prothorax with grey hairs in the anterior part; elytra testaceous.

Length $1\frac{1}{3}$ lin. ♂ ♀.

From Mr. Drège. A little wider than the species preceding, but similar otherwise; black, clothed with grey hairs on the anterior part only, the posterior one smooth and glabrous; scutellum with short hairs; elytra light testaceous, finely punctulate and with appressed hairs; in the male the pygidium is covered with squamose yellow hairs, tibiæ and hind legs brown."

"PLATYCHELUS PUSILLUS, Burm.,
Ibid., p. 145.

Black, shining, hairy; elytra and legs fuscous, abdomen with greyish scales.

Length $1\frac{1}{4}$ lin. ♂.

From Mr. v. Winthem. Quite similar to *P. melanurus*, but the punctures are more closely set, smaller, and the hairs are more grey; elytra and legs quite brown, the first are clothed with appressed hairs and are more closely punctured; hind part of the body clothed with small, nearly contiguous yellowish grey scales; pectus with white hairs."

"*Anterior tibiæ tri-dentate, but upper tooth very small. Prothorax and body short, densely villose; elytra with two or three deep furrows, filled with lanceolate squamulose hairs.*

PLATYCHELUS ALTERNANS, Burm.,
Ibid., p. 147.

"Black, elytra ferruginous and having some bands of scales; prothorax squamose along the outer margin and in the median groove.

Length 3 lin. ♀.

From Mr. Drège. This species seems to be rare, because I have seen one female only. The head is rounded in the anterior part, roughly and closely punctate and bears black hairs; the antennæ and the palpi are reddish brown; the prothorax has a median longitudinal groove, is finely scabroso-punctate, covered with simple black setæ in the anterior part as well as in the middle, and with a shorter pubescence behind, along the margin and in the furrow there are some short squamose white hairs; similar squamose hairs occur in the scutellum, as also on the three furrows of the elytra; these furrows are opaque, finely punctate, depressed and hairy; the widest runs along the suture, the other two are one on each side of the humeral callus, narrowed thence and unite at the apex of the callus; abdomen and pectus clothed with fine, small, distant hairs; the fore legs and the tarsi are brown, the smaller claw of the hind legs is very small."

"*Juxta-sutural part only deeply grooved, and filled with more closely set hairs.*

PLATYCHELUS MUSCULUS, Burm.,
Ibid., p. 150.

"Fuscous, prothorax with an æneous tinge, whole body clothed with long, greyish hairs.

Length 2 lin. ♂ ♀.

Var. Elytra and hind legs rufous.

From Mr. Drège. This species greatly resembles *P. litigosus*, owing to its elongate shape, but it is one-third smaller, more depressed, and has everywhere longer hairs; the clypeus is more rounded, broader, not sharp laterally, and closely punctulate like the prothorax the hind angles of which are sharp; in the female there is a weak longitudinal furrow, the elytra are everywhere closely punctulate and are equally covered with long yellowish grey hairs, the abdomen, pectus, and legs have similar hairs; the anterior tibiæ have three equi-distant sharp teeth; in the female the elytra, tarsi, hind legs, antennæ, and palpi are red, but in the male they are brown."

"*Posterior legs short, thick, densely hairy.*

PLATYCHELUS PUERILIS, Burm.,
Ibid., p. 151.

"Black, æneous, shining, clothed with grey hairs, anterior tibiæ sub-dentate.

Length $1\frac{1}{2}$ lin. ♂.

From Mr. Drège. Resembles *P. musculus* in a striking manner, but it is a little more slender; clypeus rounded, moderately broad, head and prothorax scabroso-punctate, the latter, which is nearly purple, is quite impunctate behind, and has a coating of long greyish hairs; elytra strongly punctate, deeply impressed alongside the humeral callus and clothed with compressed white hairs, similar but longer hairs clothe the pygidial part, abdomen and pectus; the legs are also similarly hairy, but they are black and denser in the posterior; in the anterior tibiæ the nearly obliterated outer teeth are as remarkable as the broad triangular form of the posterior; these two characters best differentiate this species from *P. musculus*."

PLATYCHELUS INTERMEDIUS, Blanch.,
Catal. Coll. Entomol., 1850, p. 63.

"Black, with ashy hairs, clypeus quadri-dentate; prothorax black, shining, punctate, sulcate behind in the middle, and with light fulvous hairs; scutellum with ashy scales; elytra broad, short, entirely pale testaceous, immaculate; legs and abdomen red; pygidium hidden by fulvous hairs; anterior tibiæ tri-dentate, claws of the hind legs nearly equal in length and bifid.

Length 7 mm. Cape Colony (exact locality not known)."

I have seen only the type of this species. It is a female, and is almost similar to *P. discolor*.

PLATYCHELUS NITENS, Blanch.,
Ibid., p. 64.

"Allied to *P. hoploides*, but smaller and more depressed; black, shining, clypeus little reflexed; prothorax convex, shining, hairy, hairs black; elytra depressed, broad, uni-costate, granulated, black, with the outer part rufous except the humeral margin; legs black, anterior tibiæ tri-dentate, claws of the hind legs unequal, inner one slender, outer one broad, bifid; abdomen entirely black, and with ashy-grey hairs inwardly.

Length 5–6 mm."

This species resembles *P. litigosus* to such an extent that at the time of my examination I noted the two as being identical, but *P. litigosus* has the anterior tibiæ distinctly *tri-dentate*, whereas in his description of *P. nitens* Blanchard says that they are bi-dentate. I did not at the time notice this difference."

COEGA, n. gen.

Mentum elongate, oblong but attenuate laterally towards the apex, moderately constricted at the point of insertion of the antennæ, and not ampliated thence, the apical part is nearly straight, and the angles are not penicillate; maxillæ long, inner lobe obliterated, upper lobe not penicillate, and produced into three sharp, hooked teeth arranged transversely at the tip; apical joint of maxillary palpi long, strongly fusiform and sub-acuminate; clypeus short, straight at the apex, but with the angles rounded; antennæ nine-jointed, club as long as all the other joints taken together, sixth joint lamellate but short; prothorax a little attenuate laterally in front, sinuate behind and with the basal angle sharp; scutellum small, ogival; elytra sinuate laterally and moderately attenuate from there towards the apex; pygidium slanting forward in the male, abdomen compressed laterally; hind legs normally robust, anterior tibiæ obliquely bi-dentate, claws double, unequal, inner one of the anterior legs short, robust and cleft, the weaker one of the intermediate one is cleft; apical spur of hind tibiæ long.

The characteristic difference between this genus and *Platychelus* is the great length of the antennal club.

COEGA ILLOTA, n. spec.

Male: Black, opaque, club of antennæ and tarsi piceous red; elytra with occasionally a broad, lateral reddish band; head very scabrose, clothed with a flavescent pubescence; prothorax closely

rugoso-punctate and clothed with very long, villose hairs; elytra elongate, slightly broader than the prothorax, sinuate laterally below the shoulders, but not much attenuate thence towards the apex, they are deeply and irregularly punctured, have two costules on each side, and from each scattered puncture springs a long appressed flavescent hair; pygidium, under side and legs with a flavescent pubescence.

Female unknown.

Length $6\frac{1}{4}$ mm.; width 3 mm.

*Hab.* Cape Colony (Worcester).

## IDUTYWA, n. gen.

Buccal organs of *Platychelus*, from which it differs in the shape of the claws, which are longer, especially the anterior ones, not so deeply cleft, and the posterior ones are single and simple; the clypeus is straight at apex with the angles slightly rounded, and the prothorax and elytra are more convex; the fore tibiæ have two oblique outer teeth, and the posterior ones no apical spur in the male.

### *Key to the Species.*

Prothorax with a median band of ashy grey hairs and a border of the same all round, elytra with three bands of appressed grey hairs on each side .. .. .. .. .. .. .. .. .. .. .. .. .. .. .. *collaris.*

Prothorax and elytra with black hairs, the latter very dark brown .. *vidua.*

### IDUTYWA COLLARIS, Burm.,

*Monochelus collaris*, Handb. d. Entomol., iv., 1, p. 156.

Male: Black, prothorax with a broad border of ashy grey, appressed, sub-squamose hairs and a broad patch of the same in the anterior part of the disk whence it is continued in the longitudinal median groove which is deep, and in addition to these appressed hairs is clothed with a blackish erect pubescence; the head is also pubescent, but the pubescence is shorter and sub-flavescent, it is very granulose all over, and the clypeus is short, straight at apex with the angles slightly rounded, yet distinct; the palpi and antennæ, with the exception of the club, are reddish, this club however is black; the prothorax is plainly convex and very rugose; scutellum short, clothed with squamose greyish hairs; elytra sinuate laterally, but attenuate towards the apex, not costulate on each side, but having there two longitudinal depressions or broad striæ, one, the longer, along the suture, the other and much shorter one, on the

discoidal part, these two depressions are filled with appressed squamose greyish hairs which form also a supra-marginal band reaching to the base, but the discoidal one does not reach quite to the apex; the propygidium and abdomen are clothed with squamose hairs similar to those on the elytra, but the pygidium has no scales, and is covered with a fuscous brown tomentum; the hind femora and tibiæ are very robust, the former very swollen, the latter short and broadly dilated triangularly; intermediate and hind tarsi villose.

Female: Resembles the male closely; the vestiture is the same, but the pygidium is clothed with greyish sub-squamiform hairs; the hind legs are as robust as in the male, but the hind tibiæ have a very distinct apical spur.

Length 6–7 mm.; width 3½–4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Calvinia).

I have but once found this species in flowers. It is generally met with dragging itself clumsily along the paths or open herbaceous spots.

IDUTYWA VIDUA, Blanch.,

Catal. Coll. Entomol. Mus. Par., p. 64.

Male: Head and prothorax shaped and sculptured as in *T. collaris*, but covered with fuscous and brown hairs which on the prothorax form a dense, erect pubescence for two-thirds of the length, and are replaced in the posterior part with appressed hairs of the same colour, there is a narrow basal longitudinal groove; scutellum covered with appressed slightly greyish hairs; elytra similar in shape to those of *T. collaris*, but instead of having bands of greyish hairs on each side of the two intervals and also above the outer margin, the whole surface is covered with very fine concolorous hairs which, although very dense, do not hide the dark brown background; pygidial part, abdomen and legs also covered with similar hairs; hind legs robust but moderately dilated; claw of the intermediate legs single and cleft.

Female unknown.

Length 6 mm.; width 3 mm.

*Hab.* Cape Colony (Cape Town).

## MITROPHORUS, Burm.,

Handb. d. Entomol., iv., 1, p. 140.

Mentum ampliate and rounded laterally in the basal part, narrowed from about the middle to the apex, nearly straight at the tip and

penicillate at the angle, upper lobe of maxillæ short, very transverse, thickly penicillate, inner lobe stiffly ciliate, apical joint of labial palpi swollen, pyriform, apical joint of maxillary ones fusiform not sharply acuminate at the tip; head with the clypeus somewhat short, quadri-dentate at the tip, broad and reflexed somewhat in the manner of *Scarabæus;* prothorax convex, attenuate laterally in the anterior part and thence nearly parallel, base not very arcuate; scutellum short, sharp at tip; elytra not much ampliated at the humeral part, very slightly emarginate below it or not at all (*ateuchoides*) and not strongly attenuate thence towards the apex; pygidium in the male slightly declivous forwards; anterior tibiæ tri-dentate, the teeth equally distant from each other, and with the apical one only slightly curved, all the claws double with the smaller ones half the length of the outer, which in the intermediate and posterior legs are deeply cleft. In the male the intermediate claws have a tooth underneath more or less similar in shape to that of some *Monochelus*. The genus includes four species, one of which, *M. atrox*, which I have not seen, might prove to be identical with *M. natalensis*, but Burmeister's description of it is far from satisfactory. The genus is purely South African.

*Key to the Species.*

| | |
|---|---|
| Elytra and pygidium clothed with contiguous yellow or sulphur-yellow scales, hind tibiæ simple .. .. .. .. .. .. .. .. | *ateuchoides.* |
| Elytra with lanceolate scales along the posterior part of the suture, the outer margin and the pygidial part; hind tibiæ somewhat deeply emarginate on the upper margin above the apex, the angles of the emargination sub-dentate .. .. .. .. .. .. | *natalensis.* |
| Elytra and pygidial part clothed with somewhat sparse, sub-squamose, appressed hairs; hind tibiæ with a long, mucro-like spur on the upper margin above the apical part, but not far from it .. .. .. .. .. .. .. .. .. .. .. .. .. .. | *transvaalensis.* |

MITROPHORUS ATEUCHOIDES, Burm.,
Handb. d. Entomol., iv., 1, p. 141.

*Gymnoloma leucophæa*, Blanch., Cat. Coll. Entom., 1850, p. 68.

Male: Black, with the scutellum, the elytra, the pygidial part and the abdomen entirely covered with minute contiguous flavous or sulphur-yellow scales, the prothorax is also covered with appressed sub-squamose hairs, as well as with a flavescent pubescence, and along the base there is a broad band of scales; head pubescent, rugose, clypeus quadri-dentate, but the two median teeth project far beyond the other two, which are not in a line and are almost sub-lateral and rounded at the tip; elytra elongate, sub-rufescent,

sub-cylindrical, not emarginate laterally, bi-costulate on each side; hind femora not very robust, hind tibiæ slender, simple; tooth underneath the claw of the intermediate legs conspicuous, sub-horizontal; basal tooth of the anterior tibiæ very small.

Female unknown.

Length 7 mm.; width $3\frac{1}{4}$ mm.

*Hab.* Cape Colony (Paarl).

### Mitrophorus natalensis, n. spec.

Male: Black; head closely scabrose, clothed with moderately short, dense, sub-flavescent hairs, clypeus very sharply quadri-dentate, the two outer teeth being only slightly shorter than the two median ones, but equally sharp; prothorax very closely scabroso-punctate and clothed with a villose, somewhat short, sub-flavescent pubescence; elytra fuscous brown, covered with appressed hair-like flavescent scales, denser in the posterior part along the suture and the apical margin, they are slightly bi-costate on each side and closely punctured; edge of propygidium, pygidium and abdomen clothed with appressed squamiform flavescent hairs; legs villose; anterior tibiæ tri-dentate outwardly, basal tooth shorter than the intermediate; hind femora robust, hind tibiæ somewhat dilated, flat in the inner side and with the upper carinate edge emarginated somewhat deeply above the apex, which is sharply sub-dentate on each side.

Length $6\frac{1}{2}$ mm.; width $3\frac{1}{2}$ mm.

*Hab.* Natal (Durban).

### Mitrophorus transvaalensis, n. spec.

Male: Black, moderately shining; head very rugose, clypeus quadri-dentate, the teeth are broad and reflexed, but the two outer ones are shorter and blunter than the median ones, but are in line with them; prothorax deeply but not closely punctate, except on the sides where the punctures are somewhat scabrose, and clothed with a moderately dense sub-flavescent pubescence; elytra distinctly bi-costulate on each side and covered with appressed and sub-appressed greyish hairs; propygidium and pygidium covered with similar hairs, which are however shorter and more squamiform; hind legs villose, hind femora robust, hind tibiæ deeply incised on the upper side above the apex, and with the upper angle of the incision produced into a long mucro; the tooth under the claw of the intermediate legs is nearly horizontal.

Length 7 mm.; width 4 mm.
*Hab.* Transvaal (Potchefstroom).

MITROPHORUS MORIO, Burm.,
Handb. d. Entomol., iv., 2, p. 478.

"Black, strongly punctate, briefly setose, elytra fuscous.
Length 3 lin. ♂.
From Kaffirland.

Somewhat smaller than *M. ateuchoides*, but similarly shaped, black, little shining, without scales, transversely scabroso-punctate all over, and having a black flat bristle in each puncture, those along the margin are longer, broader, and project like ciliæ; anterior margin of clypeus with two blunt notches and rounded angles; anterior tibiæ with three strong, blunt teeth, all the tarsi with two claws, the largest claw of the intermediate legs with a strong tooth at the base, and cleft, the smaller claw very closely pressed against the larger, and also cleft, hindermost claws similarly formed, except that the larger one is without the tooth."

I have not seen this species.

GEN. MONOCHELUS, Serv.,
Encyclop. Méthod, x., 1825, p. 375.

Mentum short, or moderately short, ampliated laterally towards the median part, very strongly constricted towards the apex, the angles of which are rounded but project greatly, the apex is deeply emarginate, and is not penicillate laterally; maxillary lobe short, robust, not penicillate at the tip, more or less deeply concave and having three or four robust hooked inner teeth, the basal one of which is sometimes trifid (*M. calcaratus*), or even quadrifid (*M. aurantiacus*, *glaberrimus*, &c.); last joint of labial and maxillary palpi somewhat short, fusiform but very swollen at the base, and truncate at the tip; clypeus sub-parallel, truncate at tip, or slightly attenuate laterally with the angles rounded; antennæ nine-jointed, club similar in both sexes; prothorax moderately convex, somewhat obliquely attenuated laterally in the anterior part and straight in the posterior, or a little ampliate in the median part; scutellum sub-ogival or ogival, somewhat short; elytra narrowed laterally towards the apex, distinctly sinuate past the humeral part, and leaving the edge of the dorsal abdominal segments uncovered, they are never strongly costate, as often as not non-costulate, and the humeral callus is always distinct and has a more or less shallow depression on each side; propy-

gidium conspicuous, pygidium vertical in the male; anterior tibiæ distinctly tri-dentate outwardly with the teeth oblique, and the basal one short, or bi-dentate obliquely, the basal tooth being obliterated; the claws of the anterior or intermediate legs are either single and cleft (*M. spinipes*), double and also cleft (*M pruinosus*, *aurantiacus*, *natalensis*), or single and cleft in the intermediate (*M. ornatus*, *lætus*, &c.), the hind claws are single and simple in the male, except in *M. gratus*, and *M. gracilis*, but in a certain number of species the claw of the median legs, which is single, but cleft, has a distinct tooth underneath, and in one (*M. calcaratus*) it is on the hind legs that this claw is toothed; the hind legs are robust, the trochanters are strongly spinose or are simple, and the hind tibiæ are either scooped or carinate beneath, dentate or not beneath the knee, and more or less strongly mucronate at the apex; some species have an apical spur on the hind tibiæ, others have not.

The insects I restrict to this genus form a very homogeneous group. They are represented in the Western and Eastern parts of South Africa, but the species which have a tooth under the claw of the intermediate or hind legs are only found in the Eastern part (Natal, Transvaal).

Two of the species included by Burmeister in this genus have been transferred to other genera. *M. parvulus* is a *Gymnoloma*, and *M. collaris*, which is more closely allied to *Platychelus* than to *Monochelus*, is placed in the new genus, *Idutywa; M. sub-vittatus*, Burm., is the female of *M. armipes*.

### *Key to the Species.*

A³. Claw of the intermediate and posterior legs without a tooth underneath.

B². Clypeus not attenuate laterally.

C². Anterior tibiæ of male tri-dentate outwardly.

D³. Hind femora with the trochanters produced into a sharp spine.

Black, very shiny; elytra with a median and a basal patch of white scales on each side, hind tibiæ with a truncate inner tooth near the knee and an ante-apical long one, an apical spur; hind claws simple .. .. .. .. .. .. .. .. *glaberrimus*.

Similar to *M. glaberrimus*, but with the elytra red; hind tibiæ with two inner teeth near the knee; hind claws double .. .. .. .. .. *gratus*.

Black, opaque, sprinkled here and there with a few white scales; hind tibiæ with a truncate toothed process in the inner part near the knee, mucronate at tip, no apical spur .. .. .. .. *spinipes.*

Black, prothorax with the median grove and a narrow marginal lateral and basal band of greyish scales; elytra bi-costulate; hind femora dentate near the knee, spine of trochanters sharp; hind tibiæ strongly compressed, carinate underneath, and having the apical part projecting .. .. .. *scutellaris.*

Black, sprinkled with numerous white scales; hind femora with a strong apical tooth under the knee, hind tibiæ sharply bi-dentate inwardly at base, mucronate at apex, no apical spur .. .. *formosus.*

D². Hind femora with the trochanters non-spinose.

Black, covered with closely set orange scales on the upper side; apical part of hind femora with a long, sub-vertical spine, hind tibiæ strongly mucronate inwardly, no apical spur .. .. .. *aurantiacus.*

C¹. Anterior tibiæ of male bi-dentate outwardly.

D¹. Hind femora with the trochanters only slightly spinose.

Fuscous brown, sprinkled with a few white scales, hind femora simple; hind tibiæ sharply triangular on the upper side, deeply excavated underneath, and with the outer edge sharply angular near the knee, mucronate outwardly, no apical spur.. .. *pruinosus.*

B¹. Clypeus a little attenuate laterally.

C². Anterior tibiæ of male tri-dentate outwardly.

D². Trochanters of hind femora sharply spinose.

Black, elytra red, shiny, sprinkled here and there with a few flavescent scales; prothorax densely scaly but having two denuded bands in the centre; hind femora not toothed; hind tibiæ deeply scooped inwardly, mucronate on each side, no apical spur .. .. .. .. .. .. .. .. *natalensis.*

C¹. Anterior tibiæ of male bi-dentate outwardly.

Black, with the elytra sub-chalybeate, densely covered with golden-yellow scales; hind femora triangular, simple; hind tibiæ scooped inwardly, strongly mucronate inwardly at tip, no apical spur .. .. .. .. *pulcher.*

D¹. Trochanters of hind femora non-spinose.

Black, elytra red; prothorax with a median, costate carina; elytra distinctly bi-striate on each

side; hind femora simple, hind tibiæ a little concave inwardly at apex, and mucronate on each side of it, an apical spur .. .. .. .. *simplicipes.*

Piceous black, with the intermediate and hind femora red; elytra bi-striate on each side and having three bands of greyish scales; hind femora simple; hind tibiæ dilated towards the apex, compressed on the upper side, broadly scooped in the inner part, and incised inwardly at a short distance from the apex, an apical spur .. .. .. .. .. .. .. .. .. .. *jucundus.*

A². Claws of the posterior legs with a distinct tooth underneath.

B². Trochanters of hind femora strongly spinose.

Black, sprinkled with moderately dense white scales on the elytra which are red and not costulate, spine of the hind trochanters separated from the thigh nearly at the apex; hind tibiæ concave, simple, upper part of the apex strongly and sharply mucronate .. .. .. .. .. .. .. .. .. *calcaratus.*

Black, with the elytra chalybeate blue and sprinkled with numerous white scales; spine of the hind trochanters small; hind tibiæ simple, inwardly concave towards the apex, the upper part of which is moderately mucronate .. .. .. *elegantulus.*

A¹. Claws of the intermediate legs with a distinct tooth underneath.

B². Trochanters of hind femora strongly spinose.

C². Elytra bi-costate on each side.

Black, with the femora red; prothorax with three dorsal bands and a marginal one of yellow scales; elytra with three bands of yellowish scales; hind femora simple, spine of trochanters very long; hind tibiæ scooped inwardly at apex and equally mucronate on each side of it, no apical spur .. .. .. .. .. .. .. .. .. *princeps.*

Red; prothorax with a median band and a broad marginal one of yellowish scales; elytra with two interrupted bands of scales; trochanters of hind femora sharp, femora simple; hind tibiæ scooped underneath, dentate inwardly past the middle, moderately mucronate on each side of the apex, an apical spur .. .. .. .. .. .. .. *ornatus.*

Black, clothed with grey squamulose hairs which are a little denser in the intervals of the elytra; pygidium not scaly; hind legs as in *M. ornatus*, but the spine of the trochanters very short .. .. .. .. .. .. .. .. *inops.*

C¹. Elytra non-costate.

Black, with the legs red, entirely covered with contiguous orange-yellow scales; hind femora simple, spine of trochanters robust, but not reaching to the median part of

the thigh; hind tibiæ very deeply scooped inwardly from base to apex, the outer edge is very sharply angular near the knee, and the inner one emits a curved tooth slightly above the apex, which is not mucronate on either side, an apical spur .. .. .. .. .. .. .. .. .. .. *lætulus.*

Prothorax with a sub-denuded band on each side of the median furrow; elytra densely scaly, the scales forming three bands; hind femora triangular, trochanters spinose at a short distance from the apex but having a tooth above it; hind tibiæ very curved, mucronate inwardly at apex, an apical spur .. .. .. .. .. .. .. .. *lætus.*

Prothorax and elytra covered with closely set whitish scales, forming no bands on the elytra; point of the trochanters forming the apex of the triangular hind femora, which are simple; hind tibiæ very curved, mucronate inwardly at apex, an apical spur .. .. .. *litigiosus.*

B[1]. Trochanters of hind femora non-spinose.

C[2]. Elytra non-costate.

Black, with the elytra sienna-brown and sprinkled with white scales, prothorax with a median supra-marginal and a marginal band of white scales; hind femora simple; hind tibiæ carinate underneath, the carina angular near the knee and ending in a short mucro at apex, no apical spur .. .. .. .. .. .. .. .. *pulvinatus.*

C[1]. Elytra bi-costate on each side.

Black, with the prothorax and elytra covered with elongate, ashy scales not closely set, hind legs moderately robust, simple; clypeus slightly rounded laterally, hind claws simple .. .. .. .. .. .. .. .. .. .. *funebris.*

Black, completely covered with greyish-white and brownish scales, the latter forming four bands on the prothorax and two on the elytra; hind legs very slender and long, claw of intermediate legs cleft .. .. .. .. *gracilis.*

## Monochelus glaberrimus, Burm.,

Plate XLII., fig. 53.

Handb. d. Entom., iv., 1, p. 155.

Male: Black, very shining, and having on the prothorax a narrow lateral band of white scales, and a basal one partly obliterated except in the middle, while in the median longitudinal groove are a few white hairs; the scutellum is clothed with elongated white scales, and in the central part of the elytra, close to the suture, there is a patch of similar scales and a rudimentary longitudinal band of the same beginning at the base but scarcely reaching to the median part; pro-pygidium and apical margin of the abdominal segments fringed with

white elongate scales; antennæ reddish with the club black; head and prothorax clothed with dense, villose fulvous hairs; clypeus parallel but with the outer angles slightly rounded, and the apical part slightly emarginate; the median posterior part of the prothorax is denuded and impunctate, but the sides are very deeply punctured, and there is a broad median groove in the central part only; scutellum broadly obtuse at tip; elytra strongly narrowed diagonally from the humeral part towards the apex, a little impressed longitudinally close to the humeral callus, and having a few shallow but broad punctures scattered on the discoidal part; pygidium vertical, smooth in the centre, punctate laterally, fringed with villose greyish hairs, not scaly; hind legs and pectus clothed with a long greyish-white pubescence; hind femora very thick, and having a short but sharp spine close to the knee but on the outer side, and the trochanter is produced into a very long, slender spine; the tibiæ are somewhat compressed, not deeply grooved beneath but have a somewhat blunt tooth at the basal inner part of the groove, and a sharp, horizontal inner spine at a short distance from the apex, where there is a short but very distinct apical spur, the walls of the groove are bluntly serrate, and the inner part of the tibiæ are very densely villose; only the claws of the hind legs are simple, the others are double and slightly cleft.

Female: Like the male in all respects, except that the hind claw is simple, but distinctly cleft.

Length 7½–9 mm.; width 4–5 mm.

*Hab.* Cape Colony (Namaqualand).

### Monochelus gratus, n. spec.

Black, with the elytra red, very shining, and with the head and prothorax, the scutellum, the under side and legs, clothed with very long, villose fulvous hairs, there are very few scales along the outer margins of the prothorax, and there is a small juxta-sutural patch of yellowish scales on each side of the elytra; in shape and sculpture it is like *M. glaberrimus*, and the hind legs are similar, except that the inner carina of the hind tibiæ is more distinctly bi-dentate near the knee. It might, however, be considered as a colour variety of *M. glaberrimus*, but for the shape of the hind claws which, instead of being simple and cleft, are distinctly double in both sexes, the inner one being a little more than half the length of the outer, and both are cleft.

Length 6½–7 mm.; width 3½–3¾ mm.

*Hab.* Cape Colony (Clanwilliam).

MONOCHELUS SPINIPES, Fabr.,
Plate XLII. fig. 51.
Spec. Insect., i., p. 44.
Oliv., Entom., i., 5, p. 72, pl. vi., fig. 63 *a. b.*
♀ *M. subvittatus*, Burm., Handb. d. Entom., iv., 1, p. 156.

Male: Black, almost glabrous on the upper side and having in the base of the prothorax and also on the scutellum and elytra a few widely scattered, whitish scales, traces of which are also seen on the sides of the metasternum and on the abdominal segments; head very scabrose; clypeus somewhat excavate and with the margins very distinctly raised, strongly angular laterally in the basal part and slightly oblique there, broad at the tip, slightly emarginate in the middle, and with the apical angles somewhat rounded; prothorax deeply and very closely scabroso-punctate, moderately deeply grooved longitudinally in the middle and having along the lateral outer margin a series of equi-distant, sub-remote short black bristles; elytra covered with somewhat closely set transverse scabrose punctures and having on each side three very faint costæ; pygidium finely punctulate with the punctures slightly scabrose; pectus very briefly pubescent; hind femora very thick and with the trochanters produced into a long spine, hind tibiæ somewhat flattened and not grooved underneath but having the lower edge strongly bi-dentate near the knee and the apical part mucronate on each side, in the great development the second inner tooth is sometimes truncate at tip or slightly bifid; hind claws single, simple.

Female: Fulvous brown, and with the upper side, the abdomen and legs covered with moderately closely set, elongate whitish scales turning to squamiform appressed hairs on the pygidium; the head is shaped as in the male, but the apical margin is still more highly reflexed; the two apical outer teeth of the fore tibiæ are more robust than in the male, and the hind claws are single and simple.

Length 10–12 mm.; width 5½–7 mm.

I have often met with this species in fields of corn or oats, at the beginning of the spring (September) but I have very seldom captured the female, whose facies differs very strongly from that of the male.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl, Malmesbury, Worcester).

MONOCHELUS SCUTELLARIS, Burm.,
Handb. d. Entomol., iv., 1, p. 155.

Male: Black, shining, clothed with appressed hairs, margins of prothorax, scutellum, and abdomen covered with white scales,

pectus with a greyish pubescence; margins of clypeus reflexed, regularly and deeply punctured, clothed with greyish hairs less dense but longer in front than behind, prothorax very rugose, briefly but very densely pubescent, grooved longitudinally in the centre, narrowly marginate with greyish-white scales, the median sulcus occasionally filled with similar scales; scutellum thickly scaly; elytra sub-scabroso-punctate, from each puncture springs a very short, sub-erect hair, and each one has two rounded, not very conspicuous costæ which are more deeply but not as closely punctured as the intervals, or the sides; propygidium, pygidium, abdomen, and pectus clothed with flavescent, contiguous scales; anterior tibiæ tri-dentate outwardly; hind femora dentate near the knee, spine of trochanters sharp; hind tibiæ red, robust, strongly compressed, laminate underneath and having the apical part projecting; tarsi longer than the tibiæ and spinose underneath.

Female: Like the male; apical spur very long, hind claws simple.

Length 8–10 mm.; width $4\frac{1}{2}$–$5\frac{1}{4}$ mm.

The only male I have seen had lost its hind tibiæ, and I have therefore to cull the description of that part from Burmeister; unfortunately it is not as clear as it might be.

*Hab.* Cape Colony (exact locality unknown). My examples are from Drège's Collection.

MONOCHELUS FORMOSUS, Burm.,
Handb. d. Entomol., iv., 1, p. 159.

Male: Black, or very dark fuscous brown; prothorax with three bands of whitish or sub-flavescent scales; scutellum and elytra sprinkled with similar scales which also edge the abdominal segments and the metasternum; head very rugose, clypeus parallel, slightly arcuate at tip, and with the outer angles not much rounded, apical margin reflexed; prothorax scarcely pubescent but having some stiff, long bristles along the anterior and lateral margins, very conspicuously grooved longitudinally in the middle, the groove usually filled with scales, very diagonally attenuate laterally in the anterior part and distinctly emarginate in the posterior where the basal angle is sharp, it is very closely scabroso-punctate; the scutellum is partly covered with elongate scales, and those on the elytra are somewhat scattered, but are still somewhat seriate; the propygidium and pygidium are without scales and nearly glabrous; the hind femora are greatly developed, the trochanters are sharply spinose, and the femora have an apical, distinct tooth under the articulation of the knee; the hind tibiæ have inwardly a broad but

very shallow groove the lower edge of which is strongly bi-dentate near the knee, the second tooth being the more developed of the two, and ending in a strong but not very long apical mucro, this edge is serrate and villose; hind claws slightly cleft inwardly towards the median part; the two basal teeth of the anterior tibiæ are very short, and strongly oblique.

Female: Light chocolate-brown and entirely clothed on the upper side with appressed, very closely set, squamiform greyish hairs which are, however, somewhat flavescent in the median groove, the hairs on the pygidial part are similar to those on the elytra, but those which cover the whole of the under side are more scale-like.

Length 7–7½ mm.; width 3½ mm.

*Hab.* Cape Colony (Namaqualand).

MONOCHELUS AURANTIACUS, Burm.,

Plate XLII., fig. 52.

Handb. d. Entomol., iv., 1, p. 157.

Male: Black, with the prothorax and the elytra covered with contiguous round orange-yellow scales; head very rugose, briefly pubescent, clypeus very rounded laterally at tip and with the margins almost non-reflexed; prothorax very diagonally narrowed laterally in the anterior part, rounded and non-emarginate in the posterior, not distinctly grooved longitudinally in the centre, and fringed along the anterior and the lateral margins with long black bristles: scutellum somewhat small and almost ogival; elytra moderately attenuate laterally towards the apex, non-costulate, and having along the suture, immediately below the scutellum, a fascicle of very long black bristles and a series of short ones following the suture, as well as some hardly distinct rows of similar but still shorter bristles projecting from between the scales; pygidium and underside scabrose, glabrous; hind femora greatly developed and having inwardly near the apex, at a short distance from the knee, a very long, sub-horizontal, robust spine hamate at the tip, the trochanters are not spinose, the hind tibiæ are curved, not quite as long as the femora, not grooved inwardly and they end in a very robust, sharp, apical mucro; the claws of the anterior and intermediate legs are distinctly double, the inner one being nearly three-quarters of the length of the outer, both are cleft; and the hind claws are simple and single.

Female: Covered like the male with contiguous orange-yellow scales on the elytra and the prothorax, but having in the discoidal

part of the latter two denuded conspicuous patches; the hind tibiæ have a conspicuous apical spur blunt at tip.

Length 9–11; width 5–6 mm.

*Hab.* Cape Colony (Namaqualand).

Monochelus pruinosus, Burm.,
Handb. d. Entomol., iv., 1, p. 159.

Male: Chocolate-brown, a little darker on the prothorax than on the rest of the body, sparingly sprinkled above and beneath with slightly elongated white scales; head and prothorax similar in shape to that of *M. formosus*, but the latter is not so deeply or closely scabroso-punctate; the elytra are similar, but the shape of the hind tibiæ is very different; the spine of the trochanters is small, and the apical spine of the femora beneath, under the knee, is conspicuous; the tibiæ are deeply grooved beneath, the outer edge is very sharply angular near the knee and ends in a sharp, curved mucro at apex, and the inner edge is simple, while the upper carina is conspicuously keeled; hind claws single, simple.

Female unknown.

Length 7 mm.; width 4 mm.

*Hab.* Cape Colony (exact locality unknown).

I have seen three examples only, collected by Drège, the locality of which is not recorded, but I think they are from Namaqualand.

Monochelus natalensis, Péring.,
Trans. S. Afric. Philos. Soc., vol. iii., 1885, p. 93.

Male: Black, with the elytra and legs red and shining; the head and prothorax are clothed with round, contiguous, somewhat orange-yellow scales leaving on each side of the disk a denuded longitudinal band, scutellum densely scaly; elytra with a few scattered scales, propygidium densely scaly, pygidium less densely scaly than the propygidium, sides of abdomen and pectus thick; head rugose, clypeus a little attenuate laterally and with the angles very rounded, very slightly emarginate at tip, margins almost non-reflexed; prothorax gradually ampliated laterally in the middle, marginate, slightly rugose laterally but with the two denuded, discoidal bands smooth, anterior and lateral margins fringed with very long, dense yellow bristles; scutellum sub-ogival; elytra non-costulate, very vaguely and sparingly punctate, attenuate laterally towards the apex, and glabrous; posterior femora very robust, armed with a conspicuous tooth beneath, under the knee, and having the trochanters very long

and produced at about the median part of the thigh into a long, sharp spine; hind tibiæ concave inwardly especially at the apex, simple, but with the edges very sharp and the inner one produced into an apical triangular, hollowed, somewhat short mucro; claws of the anterior and intermediate legs distinctly double, the posterior ones single, simple.

Female: Colour and vestiture of the male, the scales are similar and arranged in the same manner; the hind legs are slender, and the hind tibiæ have a long, apical compressed spur.

Length 9–11 mm.; width 4½–6 mm.

*Hab.* Natal (Durban, Maritzburg, Umvoti County), Transvaal (Potchefstroom, Lydenburg), Cape Colony (King William's Town).

MONOCHELUS PULCHER, Péring.,
Trans. S. Afric. Philos. Soc., vol. iii., 1885, p. 94.

Male: Bluish-black bronze with the elytra bronze-green, shining, and with the upper side, pygidial part, abdomen and pectus clothed with large, elongate, somewhat closely set golden scales, legs red, tarsi black; antennæ red with the club fuscous; head densely scaly, briefly pubescent, clypeus a little attenuate laterally and with the outer angles completely rounded, apical part nearly straight, and not emarginate, margins only slightly reflexed; prothorax very obliquely attenuated laterally in front and not much rounded past the middle, fringed with long golden bristly hairs along the anterior and lateral margins, and almost entirely covered by the contiguous scales which, however, leave a small longitudinal denuded band on each side; prothorax closely scaly; elytra attenuate laterally towards the apex, non-costulate, shagreened, the scales are large, elongato-ovate and separated from one another by a space equal to their size; the scales on the propygidium, pygidium, and abdomen are smaller than those on the elytra and closely set; the hind femora are very robust, triangular underneath and with the trochanters prolonged to the median part of the thigh, and sharply spinose there; tibiæ convex on the outer face, somewhat concave on the inner, simple but with the upper inner edge slightly serrate, and produced at tip into a long, transverse mucro as long as the two basal joints of the hind tarsi; posterior claws single, not cleft but having underneath a conspicuous, sub-median, and sub-horizontal tooth.

Female: The shape, colour, arrangement and size of the scales are the same as in the male, but the hind tibiæ have an apical spur, and the hind claw has no tooth underneath

Length 6–6½ mm.; width 3–4 mm.

*Hab.* Transvaal (Rustenburg).

### Monochelus simplicipes, n. sp.

Male: Black, with the elytra testaceous red, antennæ rufescent with the club black; head very rugose, clypeus slightly attenuated laterally with the outer angles moderately rounded, and the margins somewhat reflexed; prothorax having instead of a median groove a longitudinal, not much raised and rounded costate carina and a shallow, but somewhat broad furrow on each side, which, like the two median furrows are filled with yellow scales, the median carina is impunctate; and there is also an impunctate longitudinal space on each side of the disk; scutellum rugulose; elytra deeply and irregularly punctate and rugose laterally, and having a distinct costa in the discoidal part, the intervals on each side of the costa are somewhat deep and broad, humeral callus well developed, the juxta-humeral interval is partially filled at the base with greyish-white scales, a few of which are very sparsely sprinkled here and there; pygidium black, glabrous; abdominal segments also glabrous; pectus scaly; anterior tibiæ bi-dentate outwardly but incised above the second tooth, the incision sharply angular; anterior and intermediate claws somewhat thick, posterior ones with a short, lamellate inner one reaching only to one-fourth of the length of the outer one, both claws are simple; hind femora robust, simple, trochanters not spinose; hind tibiæ elongated and moderately dilated at the apex, somewhat compressed outwardly, slightly concave inwardly but more deeply scooped at the tip, the apices of the groove are very sharply angular, the inner one being sub-mucronate, and there is a small apical spur.

I have seen one male example only, and it is quite possible that this specimen had partly lost his scaly covering.

This is the only *Monochelus* in which the median part of the prothorax is bluntly carinate.

Length 7½ mm.; width 4 mm.

*Hab.* Natal (Karkloof).

### Monochelus jucundus, n. spec.

Male: This species is very closely allied to *M. partitus*, the facies and sculpture are identical, but the elytra are piceous red, and more distinctly costate, the scales are whiter and similarly arranged, but the hind legs are differently shaped; the trochanters of the hind femora are not produced into a spine, and the hind tibiæ are gradually

ampliated from base to apex, flattened outwardly, broadly scooped inwardly, and the inner edge is bluntly dentate at about two-thirds of the length and emarginate under the tooth, the apices are moderately sharp but not mucronate, and there is a small apical spur; hind claws single, simple.

Female: Like the male, but the three bands of scales on the elytra are very distinct.

Length $5\frac{1}{4}$–6 mm.; width $3\frac{1}{2}$ mm.

*Hab.* Natal (Durban).

MONOCHELUS ELEGANTULUS, Blanch.,
Catal. Coll. Entom. Par. Mus., 1850, p. 68.
Bohem., Insect. Caffrar., ii., p. 158.

Male: Black, with the elytra chalybeate and shining, antennæ and legs red; prothorax partly covered with yellowish, elongate scales, denser and smaller along the base, where they form a band, somewhat irregularly disposed on the disk, but partly filling the median longitudinal groove, scutellum covered with small scales; elytra with very elongate whitish scales not closely set but very numerous and somewhat seriate; propygidium, pygidium, and abdomen with similarly elongate whitish or yellowish scales looking almost like appressed squamose hairs, and also set not very close to each other; head very rugose, clypeus with the outer angles broadly rounded, and the anterior margins slightly reflexed and scarcely emarginate in the centre; prothorax gradually ampliated laterally in the middle, having on each side of the disk some deep punctures filled by the scales, as well as smooth intervening spaces, but closely and finely punctate on each side of the base, the anterior and lateral margins are fringed with very long, somewhat dense, fulvous, bristly hairs, the elytra are roughly punctate and not costulate, and although attenuate laterally towards the apex, not strongly sinuate past the humeral part; anterior tibiæ bi-dentate; posterior femora swollen, moderately robust, simple but with the trochanters produced into a short, sharp spine; hind tibiæ moderately robust, convex outwardly, flattened inwardly, concave thence towards the apical part where they end in a sub-mucronate process on each side, the upper one being the more developed of the two; hind claws with a very distinct tooth underneath, no apical spur to the posterior tibiæ.

Female: Like the male, but the anterior tibiæ have a very small, basal outer tooth, and there is no tooth under the hind claws.

Length $7\frac{1}{2}$–9 mm.; width 4–$4\frac{1}{2}$ mm.

*Hab.* Transvaal (Johannesburg).

MONOCHELUS CALCARATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 160.

Male: Black, with the elytra red and the legs piceous red; prothorax with five bands of flavescent scales, scutellum scaly, elytra with rows of scale; apical part of the propygidium, the whole of the pygidium and the sides of abdomen and of pectus scaly; head scaly; clypeus sub-obliquely attenuate, distinctly emarginate at tip and with the outer angles moderately rounded, margins slightly reflexed; prothorax ampliate laterally in the median part, punctulate laterally, but less so in the discoidal part, the median part of which is grooved longitudinally, the scales of the marginal and sub-lateral bands are set in the punctures, between the scaly groove and the sub-lateral band there are also a few scales, and the anterior and lateral margins are fringed with long yellow bristles; elytra elongate, distinctly attenuate laterally towards the apex, although not so much ampliated at the base as in *M. natalensis*, and having equi-distant elongate whitish scales disposed in one scale rows, and set in distinct seriate punctures; the scales on the pygidium are not closely set, and the hind legs are also scaly; the hind femora are much thickened, and the trochanters are produced into a long slightly curved spine which is detached from the thigh at a short distance from the apex, and projects much beyond the knee, the tibiæ are somewhat impressed inwardly but not grooved, the two edges are very sharp, and the inner one is produced into a very long, curved apical mucro with two short bristles at the tip; claws of hind legs single, not cleft, and having underneath a very distinct sub-horizontal tooth.

Female: The female is similar to the male in colour, sculpture, and vestiture, but the punctures on the elytra are seldom filled with scales; the hind claws are a little ampliate underneath but not dentate, and the hind tibiæ have an apical spur.

Length 7–8 mm.; width $3\frac{3}{4}$–$4\frac{1}{2}$ mm.

*Hab.* Cape Colony (East London, Fort Beaufort, Port St. John); Natal (Durban, Maritzburg, Umvoti County, Estcourt).

MONOCHELUS PRINCEPS, n. spec.

Male: Similar in general appearance to *M. lætus;* the shape and vestiture of the head are similar; the prothorax has the median groove filled with flavescent scales, the outer margins, including the basal one, have a broad band of similar scales, and on each side of the groove there is a short band reaching from the apex to about the median discoidal part; the scutellum is scaly and on each elytron

there are three bands of scales divided by two slight costæ; the propygidium, sides of the abdomen, and pectus are densely scaly, the pygidium has only some remote, hair-like appressed scales; all the femora are red, the hind ones are very robust, grooved beneath, but simple, the trochanters are produced into a very long spine; the hind tibiæ are piceous black like the anterior and intermediate ones, only slightly convex on the outer face, concave in the inner, slightly dilated towards the tip where the two apices are mucronate, inwardly there is no apical spur; claws of the intermediate legs with a very distinct sub-vertical tooth beneath; claws of the posterior legs single, simple.

Female: Similar to the male and with the yellow scales also similarly arranged, but the pygidium is a little less densely scaly; the femora are also red.

Length 6–7 mm.; width $3\frac{1}{2}$ mm.

*Hab.* Zululand (Eshowe); Natal (Howick).

MONOCHELUS ORNATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 161.

Male: Black, with the elytra and legs red and shining; the prothorax has a narrow median band of flavescent scales, and the sides are broadly covered with similar scales; the scutellum is hairy, and on each elytron there is a band of not very closely set whitish flavescent scales running alongside the suture from about the median part to the apex, and a dorsal one beginning at the base, but obliterated at about the median part; propygidium, pygidium, and abdomen covered with contiguous yellow scales; head as in the two preceding species, *i.e.*, a little attenuate laterally towards the apex, with the outer angles somewhat rounded and the apical margin slightly reflexed; the prothorax is deeply grooved in the centre and fringed with long, bristly yellow hairs along the anterior and lateral margins; the elytra have two slight longitudinal impressions divided by a blunt, not very distinct costa, and they are somewhat deeply punctured along the outer margins; the hind femora are very robust and simple, but the trochanters are produced into a long, sharp spine, the hind tibiæ are very broadly scooped inwardly and the inner edge is produced at about two-thirds of the length into a long, sub-transverse, mucro-like tooth, the outer edge is simple but sharp, the apices are sharp but not mucronate, and there is a small apical spur; hind claws single, simple; basal outer tooth of anterior tibiæ nearly obliterated.

Female unknown.

Length 6–7 mm.; width 3½–4 mm.

*Hab.* Natal (Durban, Frere); Transvaal (Johannesburg).

### Monochelus inops, n. spec.

Male: Black, covered on the head, prothorax and elytra with dingy, ashy-grey appressed hairs scarcely squamose, antennæ rufescent with the club black; clypeus very broadly rounded laterally with the anterior margin reflexed and not emarginate in the middle; head roughly punctate, clothed with short, slightly flavescent, erect hairs; prothorax regularly ampliate in the middle laterally, closely punctate, but the punctures are not scabrose, and bear each a short appressed hair, median part not grooved longitudinally except near the base, where there is a short sulcus, the anterior and lateral margins are fringed with very long, slightly fulvous, bristly hairs; scutellum covered with sub-squamose hairs; elytra costate in the discoidal part and costulate below the shoulder, roughly punctulate and with the squamose hairs denser in the two dorsal intervals; propygidium and under side clothed with appressed, squamose, slightly flavescent hairs; anterior tibiæ bi-dentate, hind legs robust, femora swollen, simple, but having the trochanters produced into a short, sharp spine, hind tibiæ broad but somewhat compressed, emarginate underneath near the knee, slightly concave inwardly near the apex where it is sub-mucronate inwards and sharply angular on the upper side, the upper edge is very deeply emarginate at a short distance from the apex, the upper angle of the emargination being very sharp, almost dentate; there is a small, yet distinct apical spur, and the outer surface is irregularly foveato-punctate.

Female unknown.

Length 7–7½ mm.; width 3½ mm.

I have seen four males of this species preserved in spirit; it is possible that the sub-squamose hairs are more flavescent in fresh examples.

*Hab.* I am not sure of the true habitat of this species. It might prove to be Port Elizabeth in the Cape Colony or Durban in Natal. I opine for the latter.

### Monochelus gracilis, n. spec.

Male: Black, with the legs rufescent, whole body, including the hind legs, clothed with closely set scales; clypeus very little attenuate laterally, nearly straight at the tip and with the outer angles sharp but not reflexed; prothorax setulose laterally and in front, but the

setæ are not long, it is distinctly emarginate laterally from the median to the basal part, grooved longitudinally in the middle, and completely covered above and laterally with greyish-white scales, and has a longitudinal band of light buff scales on each side of the median groove, and another above the outer margin; scutellum covered with white, slightly elongate scales; elytra elongate, deeply sinuate laterally, and attenuate towards the apex, bi-costate on each side, covered with contiguous round white scales changing to light buff on the two costæ; the scales on the pygidial part, abdomen, and pectus are pure white and very dense; the anterior tibiæ are bi-dentate outwardly, the hind femora and legs are very long, slender, and simple, the hind tarsi are slightly longer than the tibiæ, and the hind claw is double, the inner claw being less than half the length of the outer, which is cleft laterally; claws of the intermediate legs shaped as that of the posterior legs, but having in addition a strong sub-horizontal tooth under the robust outer one.

Female unknown.

Length 5 mm.; width 2 mm.

*Hab.* Transvaal (Potchefstroom).

This insect will be easily identified, not only by the slender facies, the nearly truncate clypeus, and the long, slender legs, but also by the shape of the claws of the intermediate legs which are armed underneath with a conspicuous tooth, like some other species, but are double instead of being simple.

### Monochelus lætus, n. spec.

Male: Head and prothorax black, elytra and legs light brownish red; the head and prothorax are covered with minute, nearly contiguous flavescent scales leaving a narrow longitudinal band on each side of the deep median groove partly denuded, and also a similar but shorter space midway between the first discoidal space and the outer margin; elytra densely scaly but with three narrow denuded bands, the two outer of which reach from base to apex, but the first dorsal one reaches only to about the median part, these scales are whiter than those on the prothorax and larger, and the denuded bands are not always very well defined; pygidium non-squamose, edge of propygidium, abdomen, and pectus very densely scaly; head rugose, a little attenuate laterally towards the apex, which is slightly sinuate, but the outer angles of which are rounded; the prothorax is attenuate laterally in the anterior part, rugose, and has a deep, median groove reaching from base to apex; elytra attenuate laterally towards the apex, non-costulate; pygidium convex, aciculate, moderately shining;

hind femora very strong, broadly dilated triangularly till past the median part, triangularly dentate underneath, and with the trochanters completely fused with the lower edge of the thigh, and produced at about the median part into a sharp spine a little in front of the post-median triangular tooth; hind tibiæ very curved, somewhat slender, covered with appressed white hairs, a little concave inwardly at the apex, the lower edge of which is mucronate, the mucro is short, and there is a distinct apical spur; hind claws single, simple; the fore tibiæ have the basal tooth quite obliterated in both sexes.

Female: Like the male, but the scales on the prothorax are more hair-like, the scales on the elytra are a little deeper yellow, and form two distinct dorsal bands, the juxta-sutural one is interrupted below the base, and the pygidium is covered with appressed squamose hairs.

Length 5–7½ mm.; width 3¼–4 mm.

*Hab.* Natal (Durban).

### Monochelus litigiosus, n. spec.

Male: Very closely allied to *M. lætus*, from which it differs by the uninterrupted squamose covering and the shape of the hind femora; instead of having a denuded lateral patch and a band alongside the median groove on each side of the prothorax, this part of the body is entirely covered with greyish white scales; the brownish red elytra are also covered with dense, although not contiguous, scales which are not forming longitudinal bands, and the hind femora have only the trochanterine spine beneath, this latter forms the apex of the triangle; the horizontal tooth under the median claw is stronger than in *M. lætus*.

Female: Like the male; it is also differentiated from the female of *M. lætus* by the absence of longitudinal bands of scales on the elytra.

Length 7–7½ mm.; width 4 mm.

*Hab.* Natal (Durban, Estcourt).

### Monochelus lætulus, n. spec.

Male: Black, with the whole upper surface, the pygidial part, the abdomen and pectus entirely covered with contiguous ochre-yellow scales; legs red; head, prothorax, and elytra similar in shape to those of *M. lætus*, but there is no denuded space or bands on the prothorax and the elytra; the scales on the latter are round, and they

have on each side two faintly raised costæ covered by a series of slightly lighter yellow scales; hind femora very robust and having a very small tooth at the apex, underneath close to the knee the trochanters are produced into a sharp spine; the hind tibiæ are broadly but not very deeply scooped inwardly, and the edges are sharply carinate, the outer one is very sharply angular near the knee and the inner is produced at a short distance from the apex into a conspicuous mucro-like tooth, there is a small apical spur, and the angles of the tibia are not mucronate on either side; basal tooth of the anterior tibiæ obliterated in both sexes; hind claws single, simple.

Female: Like the male, but the prothorax is covered with appressed squamose hairs instead of scales, and the apical spur is more developed.

Length 7–8 mm.; width $3\frac{1}{2}$–4 mm.

*Hab.* Natal (Durban).

### Monochelus pulvinatus, n. spec.

Male: Black, with the elytra chocolate-brown; head scaly; prothorax with a median band of whitish scales, a discoidal one and a more or less regular marginal one; elytra irregularly besprinkled with ovate white scales; scutellum, propygidium, pygidium, and under side covered with closely set whitish scales; clypeus a little more obliquely attenuate laterally towards the apex than the other species of *Monochelus*, and sub-incised at the tip; prothorax rugose, very briefly setulose, with an apical and lateral series of stiff, long, black bristles, and in the median part a narrow, median furrow; elytra with a faint, discoidal costule, very closely punctate, each puncture bearing a very short, fuscous seta; pygidium with a narrow denuded median longitudinal line reaching from the base to two-thirds of the length; anterior tibiæ tri-dentate outwardly, but with the basal tooth very small and inconspicuous; hind femora robust, moderately thickened, simple, trochanters non-spinose, hind tibiæ not convex inwardly, emarginate near the knee and very angular there, lower apical angle sharp and slightly produced, but not mucronate; claw of the intermediate legs with a distinct tooth underneath; hind claws single, simple.

Female: Like the male, but the scales are a little wider on the upper side and golden-yellow; the denuded band on the pygidium is very well defined, and the hind tibiæ have a distinct apical spur.

Length $5\frac{1}{2}$ mm.; width 3–$3\frac{1}{5}$ mm.

*Hab.* Natal (Durban).

MONOCHELUS FUNEBRIS, n. spec.

Male: Black, shining, clothed with small lanceolate greyish scales; head very closely punctate and having a very short greyish pubescence, the clypeus is slightly attenuate laterally and has the outer angles rounded; prothorax convex, ampliated and rounded laterally in the middle, faintly impressed longitudinally in the central part of the disk, deeply but moderately closely punctured, each puncture bearing a short, squamiform appressed greyish hair, and there is all round a border of thicker and slightly more flavescent squamose hairs; scutellum covered with elongate greyish scales; elytra distinctly attenuate laterally towards the apex and deeply sinuate below the humeral part, bi-costate on each side and with the intervals filled with lanceolate, somewhat closely set but not contiguous scales; propygidium, abdominal segments and pectus covered with elongate scales, pygidium with short hair-like scales broadly scattered; legs long, slender, the hind femora, which are sparsely squamose, are moderately robust and simple, and the hind tibiæ are also moderately thick, simple, and have an apical spur, the anterior ones are bi-dentate outwardly, the claws are robust, the anterior ones double with the outer one cleft, the median ones are more emarginate than incised at the tip.

Female unknown.

This species closely resembles *M. inops*, but is distinguished by the shorter clypeus, which is also less broadly rounded laterally, the absence of the long setæ in the anterior and lateral parts of the prothorax, the smaller, denser, and less hair-like scales on the elytra, and the absence of a tooth under the claw of the intermediate legs, this claw also is not bifid as in *M. inops*.

Length 5–5¼ mm.; width 2¾ mm.

*Hab.* Natal (Durban).

THABINA, n. gen.

Mentum ovoid, gradually attenuated towards the apex and not constricted laterally, straight at the apex with the angles slightly rounded and not penicillate; inner lobe of maxillæ absent, upper lobe short, concave, not penicillate and armed with four teeth; last joint of labial palpi swollen outwardly, that of the maxillary palpi fusiform, truncate at the tip; clypeus attenuate towards the apex, where it is emarginate, and with the margin raised all round; antennæ nine-jointed, club as long as the other six joints taken together; prothorax ampliated and rounded laterally; scutellum ogival; elytra sinuate laterally and very attenuate towards the

apex; pygidium sloping forwards; anterior tibiæ tri-dentate, but the basal tooth is very short and the other two are very slanting; claws of the front and intermediate tarsi double, unequal, the stouter one of the fore legs cleft, hind claw single, simple.

Intermediate in shape between some species of *Monochelus* and *Idutywa*. Its main distinctive character is the very long, flabellate club of the antennæ.

THABINA SIMPLEX, n. spec.

Male: Black, head rugose and having some very short, sub-flavescent hairs in the frontal part, clypeus reflexed all round; prothorax plainly grooved longitudinally in the centre, ampliated and rounded laterally in the middle, broadly and deeply punctured, each puncture bearing a long, somewhat fulvous bristle, and in the furrow as well as along the outer margin are some whitish, appressed squamose hairs; elytra somewhat bi-costulate on each side and having along the suture a broad band of partly erect squamose white hairs, and a discoidal one not quite as broad as the juxta-sutural, and sometimes reduced to a faint line, they are deeply but not closely punctured, each puncture bearing a long bristle; pygidial part and abdomen clothed with appressed greyish squamose hairs, which are not dense on the pygidium; legs bristly and pubescent; hind ones not especially robust, intermediate and hind tibiæ with an apical spur, fifth joint of the hind tarsi nearly as long as the three preceding taken together and bi-dentate underneath.

Length 5 mm.; width $2\frac{1}{2}$ mm.

*Hab.* Transvaal (Pretoria, Potchefstroom).

GEN. GYMNOLOMA, Burm.,
Handb. d. Entomol., iv., 1, p. 161.

Mentum ampliate near the base, attenuate laterally towards the apex, not deeply constricted near it, arcuately emarginate there, and with the angles mostly sharply dentate and slightly fasciculate, lobe of maxillæ long, robust, armed with six sharp teeth curved inwardly; apical joint of labial and maxillary palpi sub-fusiform; clypeus sharply triangular (*G. atomaria*), truncate and simple (*G. strigosa*), or truncate and dentate laterally (*G. ornata*); club of antennæ as long as the five joints preceding, sixth joint briefly lamellate; prothorax oblique laterally, in the anterior part and from there straight or little ampliate; scutellum short, bluntly rounded at the tip; elytra narrowed laterally towards the posterior part, strongly sinuate below the humeral part, and leaving a somewhat broad part

of the dorsal abdominal segments uncovered; propygidium very wide, pygidium declivous; anterior tibiæ bi- or tri-dentate outwardly, claws of the anterior and intermediate legs single and slightly cleft (*G. atomaria, femorata*), or double and each cleft in the anterior only (*G. strigosa*), but the claws of the hind legs are always single and simple; hind femora very robust and with the trochanters spinose, the tibiæ carinate underneath, and dentate or angular near the knee (*femorata, ornata, strigosa*), or slender and simple; apical spur of posterior tibiæ distinct in the males of some species, absent in others.

The distinctive characters separating this genus from *Monochelus* are the longer club of the antennæ, and also the shape of the mentum, the apical part of which has the angles sharply dentate, but this character does not hold good for all the species; the shape of the clypeus varies very much, and in several species it is quite similar to that of some *Monochelus;* the development of the hind legs and trochanters, which are so conspicuous in *Monochelus,* is also to be found in some species of *Gymnoloma.* The main characteristic distinction as given by Burmeister, *i.e.*, that all the tarsi have a single claw, while in *Monochelus,* the anterior and sometimes the median ones are double, does not hold good for all the species, either in *Gymnoloma* or *Monochelus.*

The genus stands as constituted by Burmeister, except that one species, *B. lineolata,* has been transferred to another genus; *G. elegantula, leucophæa* and *sulcicollis,* Blanch., do not belong to this genus; *G. elegantula* belongs to *Monochelus; G. leucophæa* to *Dichelus; G. sulcicollis* to *Knysna;* this last species is identical with *K. humeralis,* Burm.

### *Key to the Species.*

A². Hind femora with sharply spinose trochanters.

B³. Clypeus triangular, sharp at the tip.

C². Anterior tibiæ bi-dentate outwardly in the male.

Black, with the femora red; elytra bi-costate on each side, and having along the suture a partly obliterated line of greyish scales .. .. .. .. .. .. .. .. .. .. *femorata.*

Black, with the elytra testaceous, without scales, and plainly bi-costate .. .. .. .. .. .. .. .. .. *tibialis.*

B². Clypeus obliquely narrowed, sinuate at the tip.

Black, with the elytra chocolate-brown, non-costate, and having on each side two discoidal and one sutural band of greyish scales .. .. .. .. .. .. .. .. .. *perplexa.*

B¹. Clypeus truncate in front and with the angles dentate.

C¹. Anterior tibiæ tri-dentate.

Black, with the intermediate and hind legs red; elytra with six elongate flavescent scaly patches on each side .. *ornata.*

A¹. Hind femora with the trochanters not spinose.

B². Clypeus triangular, sharp at the tip.

Black, sprinkled on the upper side with very numerous white scales; elytra chocolate-brown, non-costulate, hind femora slender, villose .. .. .. .. .. .. .. .. .. .. .. *atomaria.*

Black, sprinkled on the upper side with numerous white scales; hind femora dilated at the apex .. .. .. .. .. *subsulcata.*

Black; elytra chocolate-brown, not scaly, slightly bi-costulate, closely and finely punctured; hind femora long, slender, villose .. .. .. .. .. .. .. .. .. .. .. .. .. *ingloriosa.*

B¹. Clypeus parallel, truncate at the tip.

C². Anterior tibiæ tri-dentate, but with the basal tooth nearly obliterated.

Black, with the elytra brownish red, opaque, margin of prothorax and suture of elytra with a narrow band of whitish scales .. .. .. .. .. .. .. .. .. .. .. *suturalis.*

C¹. Anterior tibiæ distinctly tri-dentate.

Black, with the elytra light chocolate-brown, each elytron bi-costulate in the basal part, and having two discoidal and a sutural band of greyish-white scales .. .. .. *strigosa.*

Black, with the elytra fuscous brown and sprinkled with elongate, appressed, squamose greyish hairs; prothorax with a median, a supra-lateral and a lateral band of similar hairs .. .. .. .. .. .. .. .. .. .. .. *parvula.*

Reddish brown, uniformly clothed on the upper part with small, elongate scales .. .. .. .. .. .. .. .. *pusilla.*

Black, with the elytra chestnut-brown; head and prothorax villose, almost without scales; elytra with a basal discoidal band of white scales reaching the median part, and a juxta-sutural one reaching from the middle to the apex .. .. .. .. .. .. .. *spuria.*

GYMNOLOMA FEMORATA, Burm.,
Handb. d. Entomol., iv., 1, p. 165.

Male: Black, with the intermediate and hind femora red; antennæ piceous red with the club black; head and prothorax closely scabroso-punctate; the head is clothed with stiff, short, black bristles, the clypeus is obliquely attenuate, triangular at apex; prothorax

covered with dense, long, black bristly hairs, sulcate longitudinally in the middle, with the furrow filled with greyish-white scales not very closely set, but more numerous along the outer margin, especially in the female ; scutellum scaly ; elytra elongate, very distinctly attenuate laterally from the shoulders towards the apex, clothed with a very short, slightly greyish pubescence, not dense enough to conceal the somewhat shagreened background, and having along the suture a partly obliterated series of remote ovate white scales, a few of which are also sprinkled on the posterior part of the disk, each elytron has two costules which disappear past the median part ; in the female the sutural band of white scales is much more distinct, and there is a similar one along the outer margin ; propygidium, pygidium, and under side covered with closely set scales, white in the male, flavescent in the female ; anterior tibiæ bi-dentate in the male, but with a very small third, basal tooth, claws of anterior and intermediate legs simple but distinctly cleft at the tip ; hind femora very robust, simple, but with the trochanters produced into a long, sharp spine ; hind tibiæ carinate beneath, the carina sharp, strongly angular near the knee, mucronate inwardly at apex, no apical spur ; claws of hind legs single, simple.

Female : Like the male, the hind tibiæ, however, are not carinate underneath, but the apices are as angular and mucronate as in the male.

Length 7–7¼ mm. ; width 4 mm.

*Hab.* Cape Colony (Worcester, Clanwilliam, Namaqualand).

### Gymnoloma tibialis, n. spec.

Black, with the prothorax somewhat metallic, and the elytra testaceous, not scaly on the upper side, with the exception of a few scales on the sides of the prothorax and of the scutellum, but clothed with dense scales and whitish hairs underneath ; clypeus triangular and covered, like the head, with long hairs ; prothorax very densely hairy, the hairs erect, closely and somewhat roughly punctured, deeply grooved longitudinally in the centre ; elytra strongly attenuate laterally from the base to the apex, and having on each side two conspicuous longitudinal impressions separated by two costæ, they are deeply punctured, the punctures are somewhat scattered in the anterior part, but denser and distinctly granulose behind, from these punctures spring a very short, blackish bristle ; anterior tibiæ bi-dentate outwardly ; hind femora swollen inwardly in the median part, obsoletely grooved underneath near the base, not dentate there and sub-mucronate inwardly at the tip ; femora robust, and having

the trochanters sharply spinose; pygidium and propygidium clothed with contiguous white scales.

Female unknown.

Length 7 mm.; width $3\frac{3}{4}$ mm.

*Hab.* Cape Colony (Port Elizabeth).

GYMNOLOMA PERPLEXA, n. spec.

Black, with the elytra chocolate-brown; prothorax sprinkled with sub-flavescent, numerous scales scattered on the discoidal part, but not forming bands, and denser along the outer and the basal margins; scutellum very little scaly; elytra having on each side a sutural and two discoidal narrow bands of minute sub-flavescent scales as well as a marginal one, often, however, partly obliterated or merging near the shoulder into the outer discoidal one; pygidial part and under side densely scaly, the scales not quite contiguous; clypeus very attenuate obliquely laterally, sinuate at tip, rugose, briefly bristly; prothorax closely punctured with the punctures slightly scabrose, clothed with a short, erect pubescence, but having long, bristly black hairs along the anterior and outer margins; scutellum non-scaly; elytra very closely and somewhat roughly punctured, and having on each side three series of short, black bristles; anterior tibiæ bi-dentate in the male, claws of anterior and intermediate legs single, cleft laterally; hind femora robust, simple, but with the trochanters sharply spinose; hind tibiæ carinate beneath, the carina sharp, strongly angular near the knee, and mucronate at apex; claws of hind legs single, simple.

Female unknown.

Length 7 mm.; width 4 mm.

*Hab.* Cape Colony (exact locality unknown).

GYMNOLOMA ORNATA, Burm.,
Handb. d. Entom., iv., 1, p. 163.

Male: Black, with the intermediate and posterior legs red; prothorax with a median longitudinal band of flavescent scales, a discoidal one interrupted in the middle and an outer marginal; scutellum densely scaly; elytra with eight elongated patches of yellowish scales on each side; propygidium, pygidium, and abdomen clothed with contiguous yellowish scales; head closely and somewhat roughly punctate and clothed with short, dense, black hairs, clypeus a little attenuate laterally, truncate at tip, and with the outer angles sharp and reflexed; prothorax closely scabroso-punctate and with a deep median groove filled with scales; scutellum short, sub-ogival;

elytra conspicuously narrowed laterally from below the shoulder towards the apex, bi-costulate on each side, closely and roughly punctured, very briefly pubescent in the posterior part, the elongate patches of yellow scales are disposed as follows: a small one in the base near the scutellum, an elongate basal discoidal, a juxta-sutural reaching from some distance from the base to about the median part, and a diagonal one placed outside the humeral callus, reaching to about the same distance, but beginning near the base, two smaller ones situate in the middle of the discoidal part and parallel to each other, a juxta-sutural one reaching nearly to the apex, and a supra-marginal of nearly the same length, the scales of which the bands are formed being small and round; hind femora robust, swollen, simple but having the trochanters briefly spinose; hind tibiæ sharply carinate underneath, very sharply angular near the knee, briefly mucronate in the lower apical part, and strongly angular on the upper; anterior tibiæ very distinctly and sharply bi-dentate outwardly, claws of the anterior and intermediate legs single, cleft laterally; posterior ones single, simple.

Female: The shape is similar to that of the male, but the prothorax is clothed with very dense yellowish hairs; the scutellum is scaly, the scales being flavescent white, and the whole surface of the elytra is covered with contiguous yellow scales entirely surrounding the elongated patches which are disposed as in the male, but the scales of which are paler than those forming the background; the hind legs are also robust, but much less so than in the male, the hind tibiæ are compressed and have an apical spur.

Length 7–8 mm.; width $3\frac{3}{4}$–4 mm.

*Hab.* Cape Colony (Namaqualand).

GYMNOLOMA ATOMARIA, Fabr.,
Spec. Insect., i., p. 43.
Oliv., Entom., i., 5, p. 71, pl. v., fig. 52.

Male: Black, with the elytra light chocolate-brown, sprinkled with very numerous minute white scales and having on the outer margins of the prothorax three patches of denser white scales somewhat connected; pygidium, sides of abdomen, and pectus very densely scaly, the scales white; clypeus produced into a long triangle, very sharp at apex, head very rugose; prothorax with a deep median longitudinal groove filled with denser scales, and thickly fringed in the anterior margin with very long, blackish bristly hairs; scutellum small; elytra obsoletely costulate, conspicuously narrowed laterally from the shoulder towards the apex, and leaving thus a somewhat broad part of the dorsal abdominal segments uncovered, this part is

densely squamose but has a denuded round patch on the stemmata; the fore tibiæ are tri-dentate outwardly, but the basal tooth is small, the anterior and intermediate claws are single but cleft; the hind femora are slender, densely scaly, simple, with the trochanters not spinose; hind tibiæ as long as the femora, not much wider at apex than near the base, simple, not mucronate, very densely hairy inwardly, and without an apical spur.

Female: Like the male, but with the scales distinctly flavescent, or yellow; hind tibiæ with a long, apical spur.

Length 7–7½ mm.; width 3½ mm.

*Hab.* Cape Colony (Caledon, Swellendam, Uitenhage, Graham's Town).

GYMNOLOMA SUBSULCATA, Burm.,
Handb. d. Entomol., iv., 1, p. 163.

Female: Like Burmeister I know only the female of this insect, and my example is also of Drège's collecting. Unlike other females of this genus the fore tibiæ are distinctly bi-dentate; the body is black, covered with very short greyish hairs on the head and prothorax, the latter being fringed with the customary bristly marginal long hairs, and the median sulcus and the sides have a few scattered, elongate whitish scales, which sparsely cover the scutellum; the elytra are distinctly bi-costulate on each side, the outer costa disappearing past the median part, and the space between the costæ is filled with not closely set, elongate white scales, the whole pygidial part and under side are densely scaly, the scales being elongate; the hind legs are as in the preceding species, but the tibiæ are more dilated at the apex, and have a distinct apical spur; the clypeus is attenuate laterally, bluntly triangular and slightly reflexed at tip.

Length 6 mm.; width 3 mm.

*Hab.* Cape Colony (exact locality unknown).

GYMNOLOMA INGLORIOSA, n. spec.

Black, with the elytra chocolate-brown, opaque; there are a few sparse scales along the margin, and also in the median longitudinal groove of the prothorax, very few only along the elytral suture, but the whole under side is clothed with white scales, and the propygidium is also densely scaly, but has a longitudinal denuded band; legs black; in shape this species resembles *G. atomaria;* the clypeus is similar; the prothorax is more densely villose; the elytra are slightly yet plainly costulate, and covered with contiguous, somewhat

elongate, scabrose punctures, and clothed with very short upright black hairs with on each side two series of erect bristles, the suture also is bristly; anterior tibiæ tri-dentate; hind femora long, slender, villose, not thickened or ampliated at apex.

Length 7 mm.; width 3½ mm.

*Hab.* Cape Colony (Worcester).

GYMNOLOMA SUTURALIS, Burm.,
Handb. d. Entomol., iv., 1, p. 164.

Male: Black, with the elytra reddish brown, opaque, outer and basal margins of prothorax with a broad band of sub-flavescent scales; elytra with a moderately broad band of scales along the suture, and a narrow line on the outer margin; pygidial part and abdominal segments densely clothed with yellowish-white scales leaving a conspicuously denuded space round the stemmata; legs reddish; clypeus a little attenuate laterally, truncate at tip and with the outer angles distinct, prothorax fringed in front and laterally with very long, black, bristly hairs, the median furrow is shallow, but very broad; elytra attenuate laterally towards the apex, sinuate below the humeral part, very finely punctured and extremely briefly pubescent, distinctly bi-costulate on each side and without any sprinkled scales besides those forming the sutural band and the outer marginal line; anterior tibiæ tri-dentate, but with the basal tooth very small; hind femora moderately slender, simple and without a trochanterine spine; hind tibiæ narrowed near the knee and slightly dilated from there to the apex, somewhat concave on the upper side, flattened inwardly, and with the two apices angular, but not mucronate, no apical spur

Length 7 mm.; width 4 mm.

*Hab.* Cape Colony (Stellenbosch, Malmesbury, Caledon).

GYMNOLOMA STRIGOSA, Burm.,
Handb. d. Entomol., iv., 1, p. 163.
Lacord. Gener., Atlas, pl. xxix., fig. 2.

Male: Black, with the elytra chestnut-brown, opaque; prothorax with a median and an outer marginal band of white, somewhat dense scales, which form also a partly obliterated one along the base; scutellum scaly; elytra with a sutural, two discoidal and an outer marginal line of white scales; pygidium and under side densely scaly the former having a denuded median basal patch; clypeus very slightly attenuate laterally, straight at tip and with the angles distinct; head and prothorax rugose and clothed with not very short, erect black

hairs, and having the usual fringe of black bristles; elytra very slightly bi-costulate on each side, closely punctured, extremely briefly pubescent, attenuate laterally towards the apex, and distinctly sinuate below the humeral part; anterior tibiæ sharply tri-dentate; anterior claws double, intermediate single, cleft; hind femora simple, not robust, without trochanterine spine; hind tibiæ moderately slender, a little dilated towards the apex, not mucronate there and without an apical spur.

Female: Like the male, but having an apical spur on the hind tibiæ, the scales are also whitish, but on the pygidium there is an elongate, sharply triangular patch of flavescent scales.

Length 7–8 mm.; width $3\frac{1}{2}$–4 mm.

*Hab.* Cape Colony (Mossel Bay, Worcester, Willowmore).

GYMNOLOMA PARVULA, Burm.,
Handb. d. Entomol., iv., 1, p. 160.

Black, and covered with elongate white scales, looking more like squamose hairs in the female; in the male the prothorax has a longitudinal denuded median space divided by a thin line of scales set in the shallow median groove; the scales on the elytra are moderately dense and more closely set along the sutural part; head densely scaly, lateral and apical margins strongly reflexed and anterior part of clypeus sub-excavate; prothorax ampliate laterally at middle, and not emarginate in the posterior part; elytra very little attenuate towards the apex, non-costulate; hind femora not swollen in the male, simple, and without spinose trochanter; hind tibiæ compressed, a little dilated inwardly at the middle, simple and non-mucronate at apex.

Length 5 mm.; width $2\frac{1}{2}$ mm.

*Hab.* Cape Colony (Graham's Town).

This species was included by Burmeister in *Monochelus*.

GYMNOLOMA PUSILLA, n. spec.

Male: Very closely allied to *G. parvula*, but smaller; the shape and sculpture of the head and of the outer teeth of the anterior tibiæ are similar, but the prothorax is not grooved longitudinally in the centre, and is uniformly covered with small, elongate, slightly flavescent scales; the elytra are also uniformly clothed with similar scales, the pygidial part and the abdomen are scaly.

The absence of median groove on the prothorax, which is uniformly covered with scales, distinguishes this species from *G. parvula*.

Female unknown.

Length 3½ mm.; width 1⅕ mm.

*Hab.* Cape Colony (no exact locality).

### Gymnoloma spuria, n. spec.

Male: Black, with the elytra chestnut-brown; prothorax with faint traces of scattered whitish scales, often rubbed off, elytra with a juxta-sutural band of white elongate scales beginning at about the median part and reaching to the apex, and a discoidal one reaching from the base to about the median part; propygidium and pygidium covered with elongate, not very closely set white scales, abdominal segments edged with elongate scales, pectus pubescent; head and prothorax scabroso-punctate; the clypeus is distinctly acuminate laterally towards the apex, which is emarginate in the centre, the whole head is covered with sub-flavescent, villose hairs; prothorax grooved longitudinally in the centre and clothed all over with very long, sub-flavescent villose hairs; scutellum non-scaly; elytra elongate, sinuate laterally below the shoulder, but not conspicuously narrowed from there towards the apex, very closely punctate, somewhat coriaceous, and having two not very distinct costules on each side; anterior tibiæ tri-dentate outwardly, claws double, and each cleft apically, those of the intermediate and posterior ones single, but the latter only are simple; club of antennæ as long as the five joints preceding. In this species the angles of the mentum are not very sharp.

Length 6–7 mm.; width 3–3½ mm.

*Hab.* Cape Colony (Worcester).

### KNYSNA, n. gen.

Mentum long, oblong, somewhat slender, not deeply constricted laterally near the apex, which is very slightly sinuate and has the outer angles distinct and slightly bristly, but not penicillate; lobe of maxillæ short, slightly penicillate, and having an apical tooth more or less sharply trifid, and three lower down, last joint of maxillary and labial palpi fusiform, the latter short and very swollen; clypeus in the shape of a truncate cone emarginate at apex; antennæ nine-jointed, club as long as the four preceding joints taken together; prothorax nearly plane, attenuate laterally in the anterior part, bi-sinuate along the base, and deeply grooved longitudinally in the middle; scutellum short, broadly rounded at the tip; elytra elongate, parallel, not sinuate laterally, and covering the dorsal part of the abdominal segments except the propygidium;

abdomen of the male compressed laterally, pygidium sloping forwards; legs long, slender, similar in both sexes, anterior tibiæ tri-dentate outwardly, the teeth oblique and equi-distant, the basal one very small; anterior claw double, the outer one very small and simple, the inner one slightly cleft, intermediate ones single but cleft, posterior ones single, simple; in the male the claw of the intermediate legs has a conspicuous tooth underneath, and the metasternum has on each side of the anterior part a broad, oblique, tomentose patch, while the rest of the surface is scaly.

*Key to the Species.*

Clypeus deeply emarginate at the apex; elytra with the whole interval between the suture and the first costule filled with a broad band of flavescent white hairs .. .. .. .. .. .. .. .. .. *humeralis.*

Clypeus slightly emarginate at the apex; whole surface of elytra covered with small, somewhat closely set sub-flavescent scales .. *sulcicollis.*

KNYSNA HUMERALIS, Burm.,

*Ischnochelus humeralis*, Handb. d. Entomol., iv., 1, p. 132.

Male: Black, legs with the exception of the hind tibiæ reddish, antennæ of the same colour as the legs, but with the club infuscate; prothorax with a median longitudinal band of whitish scales and a supra-lateral one not very well defined; elytra with a broad band of similar but a little more flavescent scales at a short distance from the suture, pygidial part, abdomen and pectus scaly; head scabrose, sparingly hairy, clypeus distinctly narrowed, strongly bi-dentate at the tip; prothorax with a deep median longitudinal furrow reaching from the apex to the base, the anterior and lateral margins are fringed with long, stiff bristles, the sides are deeply but not closely punctured, the punctures being filled with scales, but between the median furrow and the punctures there is a longitudinal smooth area; scutellum not scaly in my examples, but the scales may have been rubbed off; elytra nearly parallel, but still a little attenuate laterally towards the apex, very little sinuate, they are rugulose and have on each side two slight costæ the outer of which is hardly distinct, and the interval between the first and the suture is filled with the band of scales, which is slightly oblique and reaches from the base to a very short distance from the apex; the pygidium is scaly like the propygidium and the abdomen, but the scales are much more scattered; the claw of the intermediate legs has a conspicuous, sub-horizontal tooth underneath in the male.

Length 7 mm.; width 3 mm.

*Hab.* Cape Colony (Riversdale, Caledon).

KNYSNA SULCICOLLIS, Blanch.,

*Gymnoloma sulcicollis*, Catal. Coll. Entom. Mus. Par., p. 67.

Male: Black with the legs reddish, except the hind tibiæ and tarsi, which are black; head densely clothed with elongate, somewhat hair-like ashy-grey scales, prothorax with a median and a supra-lateral band of similar scales which cover also the outer margin, scutellum, elytra, pygidial part, and the abdomen clothed with very closely set but not contiguous elongate scales of the same pattern as those on the prothorax; clypeus distinctly acuminate but with the two apical teeth a little less reflexed than in *K. humeralis;* the prothorax has three longitudinal furrows, and the scales, which are much more elongate and very dense, may be said to cover the whole surface except the two median, somewhat raised longitudinal smooth areas; elytra with only one distinct discoidal costule, they are a little less parallel owing to a slight median amplication, and the scales on the pygidium are not as closely set as on the propygidium; claw of the intermediate tarsi with a conspicuous horizontal claw underneath.

Female: Like the male, but less densely scaly, and with the costule on the elytra more distinct; the claw of the intermediate legs has no tooth underneath.

Length 6–7½ mm.; width 2½–3 mm.

*Hab.* Cape Colony (Cape Town).

I have always met this species dragging itself clumsily along the ground, and never in or on flowers.

## OUTENIQUA, n. gen.

Mentum short, ovate, strongly incised laterally near the insertion of the palpi, strongly dilated from there to the apex, where it is straight with the angles distinct; maxillæ glabrous at the tip, and armed there with three apical sharp teeth bent almost at right angles (the median one of which is slightly more apical than the other two), and another trifid transverse one lower down; the joints of the labial palpi are short and the apical one is thick, sub-fusiform outwardly, straighter inwardly, and the apical maxillary joint is a little swollen inwardly, and straighter, but slightly sinuate outwardly; antennæ nine-jointed, basal joint very swollen at the tip, second short, beady, fifth and sixth produced into a short lamellate process at tip; clypeus

separated from the head by a transverse suture, sub-parallel laterally, deeply emarginate semi-circularly at tip and with the angles sharply acuminate, reflexed, and projecting transversely; prothorax oblique laterally from the apex to the median part, emarginate in the posterior, and with the base moderately arcuate; scutellum very long, narrow, and sharp at tip; elytra strongly narrowed laterally from the humeral part towards the apex, but not sinuate, and covering the dorsal part of the abdominal segments; propygidium uncovered by the elytra, pygidium vertical in the male; anterior tibiæ strongly bi-dentate in the male and sharply angular above the second tooth, the first and second teeth are remote, set nearly at right angles, the apical one is nearly twice as long as the other, and both are slightly curved backwards at the tip; the posterior femora and tibiæ are very swollen, the intermediate and hind tarsi are thick, especially the latter, the fifth joint of the posterior ones is very robust and shaped as in some species of *Pachycnema;* claws of the anterior and intermediate legs double and cleft, the outer claw being only half the length of the inner one; posterior claws double, but with the inner one very minute, and the outer simple and robust; tibiæ without apical spur in both sexes.

The general appearance of the only species known is not unlike that of *Pachycnema.*

OUTENIQUA FESTIVA, Péring.,
Plate XLIV., fig. 6.

*Gymnoloma festiva,* Trans. S. Afric. Phil. Soc., vol. iii., pt. ii., 1885, p. 95.

Male: Black, with the elytra flavescent or light testaceous yellow, and the hind legs occasionally red or reddish brown; the prothorax has a broad margin all round of bluish opaline scales and is clothed on the disk with flavescent, dense, short hairs; the scutellum is squamulose and the elytra have a very broad sutural band of bluish opaline ovate scales reaching from base to apex; the pygidial part and the under side are covered with dense, similar scales, which are also somewhat densely sprinkled on the intermediate and hind femora; the head is very rugose, and clothed with short yellowish hairs, the apical angles of the clypeus project outwardly as a transverse tooth; the prothorax is closely scabroso-punctate and is not grooved longitudinally in the middle; the elytra are clothed with appressed, dense, yellowish-white hairs, and they have on each side four distinct rows of white, long bristles; posterior tibiæ compressed, robust; intermediate and posterior femora robust, especially the

latter, which are simple with the trochanters not projecting into a spine, but are bluntly dentate on each side of the articulation of the knee; hind tibiæ thick, swollen inwardly and outwardly, slightly angular near the knee with the lower apical part very sharply angular, and the upper part developed into a long spinose mucro; the four basal joints of the hind tarsi are short and very robust, and the fifth is greatly developed, thick, as long as the four preceding and denticulate underneath, outer claw very robust, as long as the fourth joint, simple, inner claw very minute; the claws of the two first pairs of legs are double and both cleft.

Female: The female is shaped like the male, except that the pygidium is sub-horizontal; the anterior tibiæ are, however, more distinctly tri-dentate; the discoidal part of the prothorax and of the elytra is sprinkled with numerous scales, not as closely set, however, as those on the marginal and juxta-sutural bands, and these scales have a more golden sheen than in the male; the hind legs are also robust.

Length 5½–9 mm.; width 3–5 mm.

*Hab.* Transvaal (Lydenburg, Rustenburg), Southern Rhodesia (Salisbury), Mozambique (Lourenço-Marquez), Bechuanaland (Ramoutsa).

The examples from Southern Rhodesia are much smaller than the others and less brightly scaly.

## GOUNA, n. gen.

Mentum sub-orbicular, rounded also at tip, and only very slightly narrowed laterally near the apex, bristly on the outer face but not penicillate at the tip; lobe of maxillæ glabrous, concave, and armed with four strong teeth, the two basal ones set opposite one another, apical joint of labial and maxillary palpi fusiform, somewhat short, but very swollen near the base; labrum vertical, strongly developed, antennæ nine-jointed; clypeus sub-parallel, but with the apical angles rounded, straight at tip, deeply impressed, and with the apical margin reflexed; prothorax obliquely attenuate laterally in the anterior part, and straight from there; scutellum somewhat rounded at apex; elytra attenuate laterally towards the apex, slightly sinuate laterally past the humeral part, but covering the dorsal part of the ventral segments; pygidium declivous in the male; propygidium nearly completely covered by the elytra (*G. aliena*) or moderately exposed (*G. lineolata*); anterior tibiæ tri-dentate, the teeth oblique; claws of anterior and intermediate legs simple, slightly cleft, hind legs slender, simple, fore and hind tibiæ without an apical spur.

Differs from *Gymnoloma* in general facies as well as in the different shape of the mentum, the quadri-dentate lobe of the maxillæ, and the great development of the labrum.

*Key to the Species.*

Prothorax with a median, a supra-lateral and a marginal band of white scales; scutellum scaly; elytra with a discoidal white band reaching from the base to the middle, and a very short juxta-sutural median one; pygidium non-squamose .. .. .. .. .. .. .. .. *lineola.*

Prothorax with a median, a supra-lateral, and a marginal band of white scales, and also a supra-marginal patch; elytra with a juxta-sutural band of white scales and a basal discoidal one; pygidium with appressed, squamose hairs .. .. .. .. .. .. .. .. .. .. *aliena.*

GOUNA LINEOLATA, Burm.,

*Gymnoloma lineata*, Handb. d. Entomol., iv., 1, p. 162.

Black; head, prothorax, and elytra very closely punctate, the punctures scabrose and partly hidden by a very short, sub-appressed, slightly flavescent pubescence, the clypeus is a little narrowed obliquely towards the apex with the sides sinuate and slightly emarginate at tip, it is impressed somewhat deeply, and the apical margin is reflexed; the prothorax has a narrow median line and a supra-lateral one of white scales, and the outer margin is moderately broadly banded with similar ones; the scutellum is densely squamose; the elytra have a discoidal band of white scales beginning close to the base but barely reaching the median part, and a juxta-sutural one slightly shorter than the discoidal, beginning at about the median part, and obliterated at a good distance from the apex; propygidium, abdomen, and pectus clothed with dense silvery-white scales; pygidium closely punctured, not scaly or hairy; anterior tibiæ sharply tri-dentate; legs with squamose whitish appressed hairs; hind legs simple, slender, hind tibiæ without apical spur.

Length $6\frac{1}{2}$–7 mm.; width $3\frac{1}{2}$–$3\frac{3}{4}$ mm.

*Hab.* Cape Colony (Caledon, Swellendam, Bredasdorp).

GOUNA ALIENA, n. spec.

Black, sub-opaque, with the head, prothorax, and elytra closely scabroso-punctate and covered with very short, sub-appressed greyish hairs and greyish-white elongate scales numerous on the head, and forming on the prothorax a median line, a supra-lateral band, usually interrupted in the middle, and an entire marginal one, as well as a supra-marginal, lateral, median patch; scutellum

not densely scaly; elytra with a very faint, dorsal, longitudinal, raised line, and having on each side a juxta-sutural band of white scales, and a much shorter one along the humeral callus; the edge of the propygidium is scaly, the pygidium is clothed with not closely set, appressed greyish, squamose hairs, but the abdomen and the whole pectus are covered with large, conspicuous, silver-white scales; legs with squamose whitish appressed hairs, hind legs slender, simple, hind tibiæ without apical spur.

Differs from *G. lineolata* in the shape of the clypeus, and the bands of scales on the elytra are not similarly disposed.

Length 6 mm.; width 3 mm.

*Hab.* Cape Colony (Uitenhage).

? Gouna vittigera, Burm.,
*Gymnoloma vittigera*, Handb. d. Entomol., iv., 1, p. 162.

Burmeister places this species next to *Gymnoloma lineolata*. I have not been able to identify it, nor have I seen the co-type, but judging from his description, which I repeat here, it is quite possible that it should be included in the genus *Gouna*.

"Black, squamose, prothorax marginate with white; elytra with four bands, the internal ones broader than the others.

Length $3\frac{2}{3}$ lin.

Communicated by Herr v. Winthem. Altogether like *G. lineolata* in general conformation, but covered everywhere with regularly disposed scales; clypeus a little broader, frontal part and vertex with white scales; prothorax black, white on the sides and having two bands projecting from the black base to the limit of the scales, the median line is whiter and deeper; scutellum scaly; elytra with four longitudinal white bands, the two near the suture broader and longer than the other two which are narrower and shorter, between the two juxta-sutural bands and the suture there is a sprinkling of white scales; pectus and hind part of the body scaly, but not the edges of the abdominal segments; legs black, femora and tibiæ sprinkled with white scales."

*Hab.* Cape Colony.

Gen. SCELOPHYSA, Burm.,
Handb. d. Entomol., iv., 1, 1844, p. 168.

Mentum broad, ovate, constricted laterally towards the apex, dilated thence, slightly sinuate at the tip, with the angles oblique and feebly penicillate, maxillæ robust, inner lobe reduced to a point,

upper lobe very short, penicillate at the tip and armed with four robust falcate teeth; apical joint of the labial palpi sub-cylindrical but a little attenuate at the tip, that of the maxillary comparatively short, fusiform outwardly only, and slightly inflexed inwardly; clypeus a little attenuate laterally, straight at tip with the margin reflexed and the angles very sharp; antennæ nine-jointed, somewhat short; prothorax depressed, a little attenuate laterally in front, straight from there, bi-sinuate at the base; scutellum sharply ogival; elytra elongate, attenuate laterally from the shoulder towards the apex, not quite covering the edge of the dorsal part of the abdominal segments, deeply impressed diagonally in the anterior part from near the humeral part to a third of the length, and leaving the propygidium almost entirely uncovered; pygidium convex in the male, vertical or nearly so in both the sexes; anterior tibiæ sharply bi-dentate outwardly, hind femora and hind tibiæ robust and swollen in the male, all the tibiæ with an apical spur; tarsi short, thick, the fifth joint very robust in the male, all the claws double, the stronger one in the anterior and intermediate legs slightly bifid, the weaker one slender and pressed against the other, and both those of the posterior legs uncleft; body clothed wholly with minute scales, differing in colour according to the sex.

This South African genus consists of three species.

*Key to the Species.*

Body covered in both sexes with deep ochreous or dark orange-yellow scales turning to white on the abdomen; hind legs red .. .. .. .. *militaris.*

Body entirely covered with sky-blue scales in the male, dark sienna-brown in the female; legs black .. .. .. .. .. .. .. .. .. *trimeni.*

Prothorax, scutellum, a sutural and marginal band on the elytra, pygidial part and whole under side sky-blue, discoidal part of elytra lilac, in the male; the whole upper side clothed with green scales and the under side with yellow and white scales in the female .. .. .. *pruinosa.*

SCELOPHYSA MILITARIS, Gyllh.,
Schonh. Syn. Ins., i., 3, App. p. 116.

Male: Entirely covered on the upper side with minute contiguous scales varying in colour from light bright yellow to orange and ochreous, the pygidial part and the abdomen are covered with similar but flavescent scales, the clypeus, however, is without any, and the pectus is villose; the antennæ are fuscous, and the legs red and slightly pubescent, deeply punctured, with the punctures squamose; head very rugose, clypeus broadly but shallowly emarginate and with the angles sharp and somewhat reflexed;

prothorax covered with dense, moderately short, bristly hairs; scales on the scutellum a little lighter than those on the elytra; elytra faintly costulate on each side in the discoidal part for about two-thirds of the length, and having only a row of very short setæ along the suture and all round the marginal part; edge of the pygidium and of the abdominal segments with minute setæ; hind femora moderately thick, hind tibiæ longer than the femora, swollen in the middle and with a short, sharp mucro on the upper apical part, fifth joint of intermediate and posterior tibiæ strongly developed, especially the latter, which has a conspicuous triangular tooth and a smaller basal one underneath.

Female: Similar to the male in shape and colouration, but the hind tibiæ are not swollen, the fifth joint of the hind tarsi are not so strongly developed, and the scales on the pygidium are nearly always more flavescent than in the male.

Length 10–12 mm.; width 6–7 mm.

*Hab.* Cape Colony (Worcester, Clanwilliam, Namaqualand).

### Scelophysa trimeni, Péring.,

Plate XLIV., fig. 7.

Trans. S. Afric. Philos. Soc., vol. iii., pt. ii., 95, 1885.

Male: Shape of the preceding species, but clothed on the upper and under side with bright azure-blue minute scales, having a faint silvery tinge on the under side; the legs are black, the anterior ones and also the head have no scales, but the intermediate and hind legs have blue scales; the head is very scabrose and covered with a dense but not long greyish pubescence, that on the prothorax is white; the elytra are distinctly bi-costate on each side, but also striate laterally, and the suture is as much raised as the discoidal costæ, which, like the narrow intervals separating the lateral striæ, bear each a row of very short, white, bristly hairs; the scales in the posterior half of the propygidium are round, whereas in the anterior part, on the pygidium itself, and on the abdomen they are elongate; the legs are similar to those of *S. militaris*, but the third and fourth joints are developed inwardly into a long spine on the upper side, especially the latter, and the fifth joint is tri-dentate.

Female: Like the male in general appearance, but entirely covered on the upper side with brown scales intermingled with orange-yellow ones, which are partly rubbed off in all my examples on the prothorax, and similar in colour to those covering the pygidial part and abdomen, but on the posterior half of the propygidium there is a

band of darker ochreous scales, and a similar but lateral one on each side of the pygidium.

Length 10–11 mm.; width 5–5½ mm.

*Hab.* Cape Colony (Namaqualand). Found only on the plains.

SCELOPHYSA PRUINOSA, Burm.,
Handb. d. Entomol., iv., 1, p. 169.

Male: The description of the preceding species applies also to the present one, which differs in the disposition of the blue scales on the elytra, where they are dense only along the outer margins and the suture, and along the base, the whole discoidal part is also covered with scales similar to the others in shape, but opaline, and giving to the background, which is light testaceous, a lilac tinge, the whole surface is briefly but densely setulose; the hind tibiæ are not quite so inflated in the middle as in *S. trimeni.*

Female: The shape is also the same as in *S. trimeni*, but it is completely covered on the upper part with greenish-yellow scales, turning to uniform yellow on the pygidium and along the upper part of the abdominal segments, the scales on the lower part being silvery white. I have, however, seen a few examples having the same vestiture as the male, but with the blue scales on the prothorax and elytra mixed with a few greenish-yellow ones, the scales on the pygidial part being of the normal yellow colour.

Length 9–10 mm.; width 5 mm.

*Hab.* Cape Colony (Namaqualand). Seems to be met with more in the mountainous parts, but it occurs also on the plains.

GEN. LEPISIA, Serv.,
Encyclop. Méthod., x., 1825, p. 374.

Mentum ovoid, deeply constricted laterally at the point of insertion of the antennæ, dilated triangularly thence to the apex where it is deeply and broadly emarginate, the angles are slightly oblique and have a bunch of short hairs; maxillæ robust, inner lobe almost rudimentary, but produced into a point at apex, upper lobe short, strongly tri-dentate and penicillate at the tip, the two upper teeth are set opposite one another; apical joint of labial palpi short, sub-fusiform, that of the maxillary long, a little bent inwardly, fusiform outwardly and obtuse at the tip; clypeus straight at apex (*virescens*), dentate in the middle in the male (*rupicola, ornatissima*); prothorax a little attenuate laterally in the anterior part and thence nearly straight, bi-sinuate at the base, very little convex; scutellum

ogival; elytra sub-parallel, plane, not distinctly costulate, not sinuate laterally; pygidium vertical and a little convex in the male; hind legs nearly similar in both sexes, not thickened; anterior tibiæ sharply bi-dentate inwardly and having an inner, slender apical spur; claws of all the legs double, unequal, the four anterior ones cleft; tarsi moderately long, joints simple with the fifth not strongly developed in the male.

The distinctive characters between this genus and *Scelophysa* are the tri-dentate lobe of the maxillary lobe, and the slender legs which have more elongated tarsal joints, and are nearly similar in both sexes.

This South African genus includes three species.

### *Key to the Species.*

A². Clypeus triangularly dentate in the middle in the male.

Body covered with greenish scales in both sexes .. .. .. .. *rupicola.*

Upper side of body of the male purple-red and with three prothoracic bands, and one marginal one on the elytra of greenish-yellow scales, the scutellum, pygidial part, and under side similarly scaly; female covered with greenish-yellow scales but having three bands of deeper yellow on the prothorax; scutellum also yellow .. .. .. .. .. .. .. .. .. .. .. .. .. *ornatissima.*

A¹. Clypeus not dentate in the middle in the male.

Upper side covered with yellowish-green scales and with slightly flavescent ones underneath in both sexes .. .. .. .. .. *virescens.*

LEPISIA VIRESCENS, Péring.,

Trans. S. Afric. Philos. Soc., vol. iv., 1888, p. 102.

Male: Completely covered on the upper side with minute round yellowish-green scales adjoining one another, except the head; the elytra are testaceous red, but the colour of the background is hidden by the scales, which on the under side are whitish with a flavescent tinge, the legs are piceous red and the hind femora are scaly; head closely scabrose, briefly tomentose except on the clypeus which is straight at tip with the angles not sharp; the prothorax is deeply bi-sinuate at the base very much as in *Scelophysa*, and the pubescence is yellow and very dense, but short; the elytra are more attenuate laterally towards the apex than the two species following, and also shorter in proportion to the length of the head and prothorax taken together, they have a very indistinct discoidal costule on each side, and are sub-diagonally impressed longitudinally outside the humeral angle; the claws are double, unequal and cleft, except the stouter posterior one.

Female like the male, but a little more elongate, and with the legs redder.

Length 9–10 mm.; width 5½ mm.

*Hab.* Cape Colony (Namaqualand).

LEPISIA ORNATISSIMA, Burm.,
Handb. d. Entomol., iv., 1, p. 168.

Male: Head, prothorax, and legs black, the prothorax has three bands of greenish-yellow scales separated by two bands of purplish-brown ones, the elytra are purple-brown, have a bordering of yellowish green, and are partly covered with scales of nearly the same colour as the background but with a tinge of orange, and the pygidial and abdominal parts have light golden scales; head very rugose, clypeus as long as the head, slightly oblique laterally from about the median part, the outer angles are distinct but not very sharp, it is slightly bi-sinuate at the tip, the margin is reflexed and produced in the centre into a short, triangular tooth; prothorax clothed with very long villose golden hairs; elytra not plainly bi-costulate on each side, nearly parallel, and having along the suture a fringe of very villose golden hairs which from the base to about the median part are extremely long, the outer margins have a fringe of similar hairs but shorter and more bristly; the legs have fulvous hairs, and the pygidial part is also setulose; the hind claws are not cleft.

Female: Shape and size of the male, but the whole upper surface and that of the pygidial part is clothed with greenish-yellow scales, the prothorax has three bands of brighter yellow ones similar in tint to those clothing the scutellum, and the elytra, in addition to the villose hairs along the suture similar to those of the male, have each eight rows of long setæ; the apical margin of the clypeus is straight.

Length 9–9½ mm.; width 4⅔–5 mm.

*Hab.* Cape Colony (Namaqualand).

LEPISIA RUPICOLA, Fabr.,
Syst. Entomol. Append., p. 818.
Guér., Icon. Règn. Anim. Insect., pl. xxv., fig. 5.

Male: Covered on the upper side and pygidial part with green scales, and on the abdomen with greenish-yellow ones; head roughly scabrose, clothed with a flavescent long pubescence, the clypeus is denuded, rounded laterally at apex and produced obliquely there into a sharp, triangular reflexed tooth, the apical margin is also reflexed; prothorax clothed in addition to the contiguous scales with long,

villose, flavescent or yellow hairs; the scales on the scutellum are of the same colour as those covering the prothorax and the elytra; the latter are parallel, numerously costulate, but two only of the costules are plain, and all the costules bear a row of short, whitish bristles, along the suture and the outer margin these bristles are much longer and stiffer; legs black, very bristly, the smaller claw of the hind legs is not cleft. The green scales sometimes turning into greenish yellow.

Female: Exactly like the male and with the same vestiture, but the scales on the pygidium and the abdomen have a somewhat whiter tinge, and the clypeus is straight at the apex.

Length 7–8 mm.; width $3\frac{1}{2}$–4 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Malmesbury, Paarl).

## Group HOPLIDES.

*Key to the Genera.*

A². Labrum not produced vertically.

Body broad, short, depressed, clypeus straight laterally and at apex; all the claws double and unequal, body clothed with appressed hairs .. .. .. .. .. .. .. .. .. .. .. *Anisochelus.*

Body elongate, clypeus sharply narrowed, reflexed or dentate, anterior and intermediate claws double, unequal, posterior ones single, simple; body covered with squamiform hairs and occasionally with scales .. .. .. .. .. .. .. .. .. .. .. *Inanda.*

A¹. Labrum produced vertically.

B³. Body somewhat cylindrical, clothed with hairs and scales, occasionally with hairs only.

Clypeus attenuate laterally and emarginate at the tip, hind claw single, the others double, unequal and simple; maxillæ not dentate .. .. .. .. .. .. .. .. .. .. .. *Microplus.*

Clypeus rounded laterally or sub-parabolic; claws of anterior and intermediate legs double, unequal, only the stouter anterior one cleft; maxillæ sharply pluri-dentate; body clothed with scales or sub-squamose hairs .. .. .. .. *Microplidus.*

B². Body clothed with sub-squamose hairs and no scales.

*a*². Maxillæ not dentate.

Clypeus short, sub-parabolic, claws of anterior and intermediate legs double, unequal.
Last joint of maxillary palpi very swollen in the middle and spindle-shaped .. .. .. .. .. .. .. .. *Blikana.*

Last joint of maxillary palpi elongate, cylindrical .. .. *Harpina.*

*a*¹. Maxillæ dentate.

$b^2$. Antennæ nine-jointed.

Clypeus straight with the outer angles rounded, club of the antennæ as long as all the other joints together; claws double, unequal, and with the more robust one cleft .. *Nanaga.*

Clypeus excavate, all the claws double, somewhat unequal and slightly cleft; posterior tibiæ of the male with an apical spur; antennæ nine-jointed; the two apical teeth of the anterior tibiæ set close to each other .. .. .. *Cylichnus.*

Clypeus excavate, the four anterior claws double, unequal, simple and very divaricating; posterior tibiæ of the male without an apical spur; antennæ nine-jointed; the three outer teeth of the anterior tibiæ equidistant .. .. .. *Rabula.*

$b^1$. Antennæ ten-jointed.

Clypeus parabolic, not excavate; the four anterior claws double, unequal, very divaricating, and cleft; hind ones single, simple; four anterior tarsi moderately long .. *Congella.*

Clypeus straight in front, deeply emarginate, all the claws double, unequal, and simple; four anterior tarsi long .. *Kareiga.*

$B^1$. Body covered with scales.

Clypeus broad; antennæ nine-jointed with the outer angles rounded; the four anterior claws double, unequal, cleft; elytra with a very plain callus on each side at apex; hind tibiæ of the female only with a spur .. .. .. .. .. *Hoplia.*

## Gen. ANISOCHELUS, Burm.,
## Handb. d. Entomol., iv., 1, p. 170.

Mentum very swollen in the middle, strongly narrowed at the base and towards the apex where it is deeply constricted at the point of insertion of the palpi, thence dilated triangularly with the angles rounded and slightly penicillate, and broadly and deeply emarginate at the tip; upper lobe of maxillæ short and having at the tip a long pencil of hairs, it is armed with three strong teeth, the two upper ones set opposite each other are falcate, and the basal one is simple and not much hooked (*inornatus*) or briefly trifid (*neglectus*); apical joint of labial palpi cylindrical, that of the maxillary also sub-cylindrical, but a little more swollen outwardly than inwardly; antennæ nine-jointed; clypeus a little rounded laterally, straight at tip; prothorax a little attenuate laterally in front, base not sinuate; scutellum elongate, sharply triangular; elytra depressed, not sinuate laterally, singly rounded behind, and leaving the propygidium uncovered; pygidium nearly vertical in both sexes; abdomen broad, not contracted; anterior tibiæ bi-dentate outwardly (*hilaris*, *neglectus*), or

tri-dentate (*inornatus*), anterior claws double and both cleft, the intermediate ones double but unequal, and either both cleft (*inornatus*) or only the stronger one (*neglectus*), posterior ones double, unequal.

I know only two out of the three species included in this genus by Burmeister. Their facies is quite unlike that of the other insects included in this group, and in shape they somewhat resemble some species of *Peritrichia*.

*Key to the Species.*

A.[2] Body not shiny.
Prothorax and elytra clothed with long, villose hairs in both sexes; elytra light chestnut with a fuscous border; propygidium with a transverse band of white hairs in the male .. .. .. .. .. *inornatus*.

Prothorax black, villose; elytra chestnut-red or testaceous according to the sexes, and clothed with dense appressed testaceous hairs *neglectus*.

A[1]. Body shiny.
Whole body clothed with very dense long hairs; elytra pale testaceous .. .. .. .. .. .. .. .. .. .. .. .. .. *hilaris*.

ANISOCHELUS INORNATUS, Burm.,
Handb. d. Entomol., iv., 1, p. 171.

Male: Black, with the elytra testaceous and having a broad lateral fuscous border; head very rugose, clypeus a little rounded laterally, straight at apex and with the lateral angles distinct, the head and prothorax are clothed with very long, erect black hairs, and the surface is finely aciculate; scutellum briefly pubescent; elytra broad and somewhat short, sub-quadrangular and singly rounded at the apex, they are very flat, slightly impressed longitudinally along the suture, and also along the outer margin, not costulate, punctulate, set with very short, sub-appressed black hairs, not dense enough to form a pubescence, and long black bristles somewhat scattered but more numerous on the shoulders and in the anterior part; pygidium broad but not long, villose and having a conspicuous transverse band of appressed white silky hairs along the base, the other villose hairs are black; abdomen and pectus clothed with a greyish pubescence; anterior tibiæ tri-dentate, claws of the anterior and intermediate legs double and both cleft, those of the posterior legs are double, but only the smaller one is cleft; legs piceous, very bristly.

Female: Shape and size of the male; it is also very villose on the prothorax and the elytra, but the latter especially are also covered with dense, appressed greyish hairs; the pygidium has a transverse band of greyish hairs along the base and at the apex, and the hairs and the pubescence underneath are a little more flavescent.

Length 6 mm.; width 4 mm.

*Hab.* Cape Colony (Namaqualand).

ANISOCHELUS NEGLECTUS, Burm.,
Handb. d. Entom., iv., 1, p. 171.

Head and prothorax nearly black but with an æneous sheen, which is also to be observed on the legs and under side; elytra light chestnut-brown; head and prothorax very rugose and clothed with a dense, long, sub-appressed flavescent pubescence mixed with erect setæ, the latter are denser in the anterior part and also along the outer margins; elytra short and broad, nor costulate and covered with dense appressed flavescent hairs, and a few erect setæ in the basal part; propygidium and pygidium clothed with dense, long, appressed flavous hairs; legs hairy, tarsi piceous red. The differences between the two sexes are hardly noticeable.

Length 5–5¼ mm.; width 3 mm.

*Hab.* Cape Colony (Cape Town, Stellenbosch, Paarl).

ANISOCHELUS HILARIS, Burm.,
Handb. d. Entomol., iv., 1, p. 170.

"Black, shining, clothed with fulvous hairs; elytra chestnut-brown; hind tibiæ and tarsi very densely hairy.

Length 2½ lin. ♂.

Communicated by Mr. Drège. Head black, densely punctured, but nevertheless shiny; frontal part and vertex of the head with brown hairs; prosternum shining with a silky lustre, longitudinally grooved and having some scattered punctures and long, reddish-yellow hairs which are denser on the sides; scutellum black; elytra pale chestnut-brown, shiny, coarsely punctate, clothed with hairs of unequal length between which long hairs occur at the suture and on the shoulders, lateral margins and sides as well as ventral surface of the abdomen, sternum and legs with long, equal hairs, underneath these hairs are whitish but on the tibiæ and tarsi they are reddish-brown, the tarsi are somewhat reddish, and the hind ones are more densely hairy than the others."

I have not seen this species, the habitat of which is probably the Cape Colony.

INANDA, n. gen.

Mentum ovate or elongato-ovate, strongly constricted laterally, expanding at the apex where the angles are rounded and the apical

part straight, or broadly but not deeply emarginate; maxillæ elongate, robust, inner lobe ending in a sharp point, but very little developed, upper lobe horny, armed with four long, sharp inner teeth (*sulcicollis*, *gracilis*) or with six (*trivialis*), and having a fine pencil of hairs at the tip; apical joint of labial palpi sub-fusiform outwardly, but not inwardly, that of the maxillary elongate and fusiform; clypeus plainly narrowed laterally towards the apex and expanding there into two sharply angular reflexed teeth; antennæ normally nine-jointed, club not longer than the four preceding joints together; eyes very large, conspicuously divided in the anterior part by the canthus; prothorax a little ampliated laterally in the middle, more attenuated in the anterior than in the posterior part, base very little arcuate, hardly sinuate; scutellum moderately long, ogival; elytra elongate, sinuate laterally but very little attenuated towards the apex, and covering the greatest part of the propygidium; pygidium subvertical, abdomen very little compressed; legs slender, all the tibiæ with an apical spur, which is, however, very small in the anterior ones, and is even wanting in *gracilis;* the anterior tibiæ are tridentate outwardly, the two apical ones are oblique, but the shorter basal one is straight; anterior and intermediate claws double, unequal, the smaller one is very short, the anterior ones are both cleft, but only the longer intermediate one is cleft, the hind ones are single and simple.

The three insects included in this genus are covered with very long hairs and minute scales, or with appressed, slightly squamose hairs. They are easily distinguished by the shape of the clypeus.

*Key to the Species.*

Clypeus as broad at apex as at base, and tri-dentate; whole body clothed with very long villose hairs and scales .. .. .. .. .. *sulcicollis.*

Apical part of clypeus narrowed and straight; prothorax and elytra clothed with sparse yellow squamose hairs.. .. .. .. .. .. .. *gracilis.*

Apical part of clypeus produced into two sharp, reflexed teeth; prothorax and elytra clothed with flavescent appressed hairs .. .. .. *trivialis.*

INANDA SULCICOLLIS, Bohem.,

*Peritrichia sulcicollis*, Insect. Caffrar., ii., p. 1, 46.

Black, with the anterior tibiæ and all the tarsi piceous red, covered above and under and also on the legs with extremely long greyish flavescent hairs, and somewhat dense, ovate, greyish scales on the elytra, prothorax, pygidium, and abdomen; head roughly punctate, clypeus much reflexed at the apex with the angles projecting as a

sharp tooth, and having also an equally high tooth in the centre; prothorax scabroso-punctate in the anterior part, punctate in the posterior, and slightly grooved longitudinally towards the base; elytra very rugose, not plainly costulate, only slightly sinuate and attenuate laterally towards the apex; the longer claw of the anterior legs is very deeply cleft.

Length 5 mm.; width 2 mm.

*Hab.* Transvaal (Potchefstroom).

### Inanda gracilis, n. spec.

Head, prothorax, pectus, and scutellum black; elytra, abdomen, and legs testaceous red; head and clypeus very scabrose, the latter is strongly reflexed at the tip, with the angles sharp but not projecting, and the median part is more raised than the angles without, however, being dentate, the whole head is covered with an erect, yellow pubescence; prothorax closely scabroso-punctate laterally but with the median part of the disk nearly impunctate, and with only a few punctures along the base, it is moderately densely covered with small, sub-squamiform yellow appressed hairs; elytra elongate, very slightly sinuate and attenuate laterally towards the apex, deeply impressed longitudinally along the suture and having a similar discoidal impression reaching from the base to the median part, it is finely but not closely punctured, and in each puncture there is a minute appressed yellow hair; propygidium, pygidium, and abdomen clothed with hairs similar to those on the elytra; the basal tooth of the anterior tibiæ is very small, and the inner apical spur is wanting.

Length 5 mm.; width $2\frac{1}{4}$ mm.

*Hab.* Natal (Durban).

### Inanda trivialis, n. spec.

More massive than the two preceding species; black with the elytra chestnut-red; head very scabrose and with the clypeus produced into two sharp reflexed teeth at the tip, the whole head is covered with sub-appressed flavescent hairs; prothorax scabroso-punctate but more densely so on the anterior part, and clothed with a moderately long and moderately dense appressed flavescent pubescence; elytra hardly sinuate laterally and very little attenuated towards the apex, plainly bi-costate on each side and with the suture raised, irregularly punctured, and clothed with somewhat long, sub-squamiform, not closely set flavescent hairs; propygidium, pygidium, under side and hind legs with almost similar appressed hairs; anterior tibiæ

with a minute inner spur; larger claw of anterior legs not deeply cleft.

Length 5¼–6 mm.; width 3 mm.

*Hab.* Natal (Durban).

### Gen. MICROPLUS, Burm.,
### Handb. d. Entomol., iv., 1, p. 174.

Mentum straight laterally but slightly attenuated towards the apex where it is nearly straight, with the angles distinct; maxillæ moderately elongate, upper lobe transverse, short, truncate at apex, not toothed but having there a few short, stiff bristles, slightly dentiform, and a thin pencil of hairs, apical joints of maxillary and labial palpi slightly curved inwardly and sub-fusiform outwardly, the intermediate joint of the labial seems fused with the third, and the two intermediate ones of the maxillary are obconical, the second not much longer than the third; clypeus a little attenuated laterally towards the apex, slightly hollowed there and with the apical margin a little emarginate but with the anterior angles sharp; prothorax not very convex, plainly obliquely attenuated laterally from the median part to the anterior, straight thence as far as the outer angle which is distinct but not sharp, base bi-sinuate; scutellum longer than broad, ogival; elytra elongate, sub-parallel, rounded behind, not very convex, covering the basal part of the propygidium; pygidium obtusely triangular, vertical in the male; abdomen not compressed; all the tibiæ with an inner spur; interior ones bi-dentate in the male, and with a minute third tooth in the female; anterior and intermediate claws double and unequal, the posterior single and simple, the stronger claw of the anterior and intermediate is slightly cleft and so is the weaker claw of the anterior legs.

Burmeister includes in this genus, of which the South African *M. nemoralis* is the type, several Madagascar species, but I am not sure that they belong to it.

### Microplus nemoralis, Burm.,
### Handb. d. Entomol., iv., 1, p. 174.

Rusty red, moderately shining; head clothed with short squamose flavescent hairs looking like scales, a few of these are to be seen along the marginal edges of the prothorax, on the scutellum and along the apical margin of the elytra; clypeus plainly reflexed and with the angles sharp, slightly emarginate in the middle and granulose; prothorax very closely punctured, each puncture bearing a

slightly flavescent and very short appressed hair, there are also a few erect bristles on the disk, and a fringe of them along the anterior and lateral margins; elytra nearly oblong, but not quite parallel owing to a supra-lateral sinuation, they are not plainly costulate, but are somewhat striate in the discoidal part, moderately deeply but somewhat closely and irregularly punctate, and have on each side eight series of short, white setæ regularly disposed and not closely set, between these rows are some scattered, small, flavescent hair-like scales which are a little less remote on the posterior part, and often rubbed off; the pygidium, abdomen, and pectus are clothed with appressed flavescent hairs, and the legs are more bristly than pubescent.

Length $7\frac{1}{2}$–8 mm.; width $3\frac{3}{4}$–4 mm.

*Hab.* Cape Colony (Cape Town).

This species is crepuscular.

## MICROPLIDUS, n. gen.

Mentum oblongo-ovate, not very deeply narrowed at the point of insertion of the antennæ, nearly straight at the tip with the angles somewhat rounded and not penicillate; inner lobe of maxillæ indistinct, but sharp at the tip, the upper one is short, has a thick pencil of hairs at the tip, and four or five sharp teeth inwardly; apical joint of labial palpi short, swollen, that of the maxillary moderately long, sub-fusiform; clypeus broadly rounded laterally, and with the margin slightly reflexed, it is a little shorter than the head, which is very rugose; antennæ nine-jointed, club short, ovate; prothorax convex, distinctly narrowed obliquely laterally in the anterior part and nearly straight from there to the posterior angle, but also occasionally a little ampliated and rounded in the middle, the base is slightly bi-sinuate; scutellum moderately long, narrow, ogival; elytra somewhat convex, very little emarginate laterally below the humeral part, but a little attenuated thence towards the apex, and covering the greater part of the propygidium; pygidium nearly vertical; tibiæ with an apical spur, anterior ones bi-dentate or occasionally with a third tooth (*pumilus*), the two teeth very oblique and long, posterior legs robust, the tibiæ broad, shorter than the thigh; claws of forelegs double, unequal, the stouter one cleft at the tip; those of the intermediate and posterior legs single or double, simple or cleft.

The insects included in this genus have a peculiar facies owing to their narrow elongate body. They can be divided into two sections, according to the body being entirely or partly covered by scales, or

by appressed hairs. In the two species belonging to the latter section the teeth of the maxillæ are smaller and less plainly distinct than in the others.

*Key to the Species.*

A². Body covered with scales.

B³. Claws of the intermediate legs single, simple in the male.

Body covered with round white scales .. .. .. .. .. .. *albiger.*

Body covered with round white scales, but having a denuded spot on each elytron .. .. .. .. .. .. .. .. .. .. .. *stabilis.*

B². Claws of the intermediate legs double, but inner claw very small.

Body covered with a black tomentum, elytra with five interrupted bands of white round scales .. .. .. .. .. .. *luctuosus.*

Body covered with minute elongate flavescent scales, and having a small denuded spot on each elytron .. .. .. *binotatus.*

B¹. Claws of the intermediate legs double, inner claw long.

Body covered with small elongate whitish scales; anterior tibiæ tri-dentate .. .. .. .. .. .. .. .. .. .. .. *pumilus.*

Body covered with very dense, ovate flavescent scales, each elytron with five rows of short, whitish bristles; anterior tibiæ bi-dentate .. .. .. .. .. .. .. .. .. .. .. .. .. *persimilis.*

A¹. Body covered with appressed hairs.

Upper side and pygidium covered with thick, slightly squamose greyish hairs; claws of the intermediate legs single .. .. .. *algoensis.*

Upper side and pygidium covered with fine non-squamose appressed hairs; claws of intermediate legs double .. .. .. .. *vulgus.*

MICROPLIDUS ALBIGER, Burm.,
Handb. d. Entom., iv., 2, p. 482.

Male: Reddish brown, with the head and prothorax black, covered above and under with round white scales; head very briefly pubescent; clypeus broadly rounded laterally and very rugose; prothorax plainly narrowed laterally in the anterior part and straight thence, with the basal angle somewhat sharp, moderately convex, and with a margin of very short bristles; scutellum slightly elongated, ogival, densely scaly; elytra elongated, not sinuate laterally, but a little attenuated towards the apex, somewhat convex, not costulate; pygidium vertical, densely scaly; claws of anterior legs double, unequal, the stouter one cleft at the apex, intermediate and posterior tarsi with a single, simple claw.

Length 8–8½ mm.; width 4 mm.

*Hab.* Natal (Durban).

I have not seen the female of this insect. According to Burmeister it is setose, instead of squamose, and the claws of the intermediate legs are double and cleft, the posterior legs have a single claw which is also cleft.

### Microplidus stabilis, n. spec.

Similar in size, shape, and sculpture to *M. albidus*, it is covered with scales identical in colour and size, but on each elytron there is a small, sub-quadrate or transverse denuded space close to the suture, and situated slightly past the median part.

Length 6½–7¼ mm.; width 3¼–4 mm.

*Hab.* Natal (Durban, Umvoti).

### Microplidus binotatus, n. spec.

Head, prothorax, legs, and pectus black, elytra, pygidial part, and abdomen chestnut-brown; clypeus with the outer angles slightly oblique, head briefly pubescent; prothorax plainly attenuated laterally in the anterior part and somewhat rounded in the median, convex, covered with scale-like flavescent appressed hairs, and very closely and finely punctured; pygidium covered with minute, elongate subflavescent scales; elytra with two nearly obliterated costules on each side, very closely punctulate and having in each puncture a minute elongate flavescent scale, except near the suture at about the median part, where there is a small denuded round spot; on the pygidial part and on the abdomen the scales are thicker than on the elytra and more greyish, and the pectus has an appressed pubescence; both the claws of the anterior legs are cleft at the tip, and the inner of the intermediate ones is hardly half the length of the outer.

Length 6 mm.; width 3 mm.

*Hab.* Natal (Durban).

### Microplidus luctuosus, Bohem., Insect. Caffrar., ii., p. 159.

Black, opaque, clothed with a fuscous tomentose pubescence on the upper side; prothorax with three bands, often partly obliterated, of round scales; elytra with four longitudinal bands of white round scales, broadly interrupted in the median part of the disk; pygidial part and abdomen clothed with elongate white scales, pectus with scales and appressed greyish hairs, legs pubescent but not scaly;

head very rugose, covered with a very short, somewhat fulvous pubescence; prothorax also very closely punctured and clothed with moderately long erect hairs; scutellum not scaly; elytra elongate, very slightly sinuate laterally, not very distinctly tri-costulate, and having rows of very short erect bristles; the antennæ are rufescent, and the legs black; the inner claw of the intermediate tarsi is very small, and often obliterated, and only the outer claw of the anterior legs is cleft.

Length 7–9 mm.; width $3\frac{1}{2}$–$4\frac{1}{4}$ mm.

*Hab.* Cape Colony (Kowie, East London); Natal (Durban, Maritzburg).

MICROPLIDUS PUMILUS, Bohem.,
Insect. Caffr., ii., p. 160.

Chestnut-brown, covered on the upper and the under sides with closely set but not quite contiguous, small, elongate, slightly flavescent scales; the head and prothorax are very closely punctured and not pubescent, the whole head is covered with scales, the clypeus is much rounded laterally, the scales on the prothorax are quite similar to those on the elytra, the latter are not plainly costulate, but along the suture and also on each side there are faint rows of minute whitish bristles; the scales on the pygidial part and the under side are finer, more appressed, and more hair-like than on the upper side, and the anterior tibiæ have a third minute outer tooth; inner claw of intermediate legs more than half the length of the outer.

Length 4 mm.; width 2 mm.

*Hab.* Natal (Durban).

MICROPLIDUS PERSIMILIS, n. spec.

Chestnut-brown with the legs rufescent like the preceding species, which it greatly resembles, and also covered above and under with flavescent scales, but it is more elongate, the scales, which are smaller, are more closely set, thus almost obscuring the colour of the background, and those on the under side and pygidial part are round and also very closely set; each elytron has four plain rows of whitish bristles in addition to a sutural and an outer marginal one; the anterior tibiæ are normally bi-dentate outwardly, both the claws of the anterior and intermediate legs, and also the single claw of the posterior are cleft, and the inner one of the intermediate legs is half the length of the outer.

Length 6 mm.; width $2\frac{1}{2}$ mm.

*Hab.* Natal (Durban).

MICROPLIDUS ALGOENSIS, n. spec.

Chestnut-brown, clothed above and underneath with a somewhat dense appressed greyish pubescence assuming on the elytra a somewhat squamiform appearance; antennæ rufescent; clypeus, head, and prothorax normally punctured and scabrose; elytra elongate, very little sinuate laterally, not plainly costulate; legs very pubescent; claws of the intermediate and posterior legs single, simple; the prothorax is a little more rounded laterally in the middle than in the other species.

Length 8 mm.; width $3\frac{1}{4}$ mm.

*Hab.* Mozambique (Delagoa Bay).

MICROPLIDUS VULGUS, n. spec.

Rusty brown with the legs a little paler, clothed above and underneath with a fine appressed greyish pubescence not dense enough to hide the colour of the background, and nowhere squamulose; it is similar in shape to the preceding species, the prothorax being also rounded and more ampliated laterally at the middle, but the apical margin of the clypeus is more reflexed; the elytra are very faintly bi- or tri-costulate, and have no series of short bristles; the claws of the intermediate legs are double and both slightly cleft, that of the hind ones single and also slightly cleft.

Length $6\frac{1}{2}$–7 mm.; width 3–$3\frac{1}{2}$ mm.

*Hab.* Cape Colony (Kowie).

BLIKANA, n. gen.

Mentum oblong but distinctly attenuate laterally towards the apex and not deeply incised at the point of insertion of the labial palpi, not dilated thence, broadly but not deeply emarginate at the tip where the angles are rounded and not penicillate, the surface is very densely villose; the maxillæ are strong, horny, the two lobes are indistinct, straight at the tip and with a few non-penicillate bristles, concave and having no inner teeth; apical joint of labial palpi very swollen outwardly but not inwardly, that of the maxillary in the shape of a spindle conspicuously swollen at the centre and very sharp at the tip; clypeus quite parabolic and slightly elongate, not divided from the head by a suture; antennæ nine-jointed, club elongate, as long as all the four joints preceding, prothorax as in *Harpina;* elytra also elongated, parallel, rounded behind and covering the propygidium, the latter is vertical in the male; abdomen not

compressed; legs moderately slender but hind ones robust and with the tibiæ somewhat dilated triangularly; anterior tibiæ strongly bi-dentate, the apical tooth is very long, and there is no apical spur; claws of the anterior and intermediate legs double, unequal, but the smaller one is nearly as long as the stronger one, which is cleft in the anterior legs, whereas in the intermediate both are cleft.

This genus differs from *Harpina* in the shape of the last joint of the maxillary palpi, and the cleft claws.

### Blikana comosa, n. spec.

Black, covered all over with a very long pubescence, fuscous brown on the prothorax, mixed with sub-flavescent greyish hairs on the elytra where they form there four or five greyish longitudinal bands on each side; abdomen, pectus, and legs densely villose, the pubescence ashy-grey; head and prothorax very closely and somewhat roughly punctured; elytra oblong, parallel, strongly coriaceous and having on each side two very plain costæ; propygidium and pygidium clothed with dense greyish hairs similar to those on the abdomen; hind legs somewhat robust in the male, the tibiæ being plainly dilated at apex.

Length 7–8 mm.; width 4 mm.

*Hab.* Cape Colony (Cape Town).

### Gen. HARPINA, Burm.,
### Handb. d. Entomol., iv., 1, p. 201.

Mentum obovate laterally from the base to the point of insertion of the labial palpi, attenuate from there and quite parabolic at the apex where there are no setæ, maxillæ robust, horny, the two lobes indistinct, very obliquely truncate at the apex, penicillate there and without inner teeth; apical joint of labial palpi very swollen outwardly, that of the maxillary elongate, cylindrical, but slightly bent inwards; clypeus broadly rounded laterally but a little blunt at the apex, and with the margin finely reflexed, but it is not concave, and it is separated from the head by a transverse suture; prothorax obliquely attenuate laterally from the apex to the middle, nearly straight from there to the base which is sinuate, and not very convex on the disk; scutellum longer than broad, ogival; elytra somewhat broader than the prothorax, parallel, covering the whole propygidium; pygidium as broad at the base as long, vertical in the male, abdomen scarcely compressed; legs moderately strong; anterior tibiæ tri-dentate, claws of the anterior and intermediate

legs double, unequal, the smaller claw is about two-thirds of the length of the stronger, and instead of being appressed, it divaricates plainly, the posterior claws are single, and simple.

HARPINA VITTIGERA, Burm.,
Handb. d. Entomol., iv., 1, p. 201.

Black, moderately shining; head very closely scabroso-punctate, clypeus sub-foveolate; prothorax finely shagreened and having deep scattered punctures each bearing a stiff erect cilia, among these are spread a few greyish appressed hairs; elytra oblong, parallel, coriaceous and having on each side two distinct costæ and four bands of appressed, squamose, greyish-white hairs, in the first three intervals there is a line of single hairs, but between the third band and the supra-marginal one the hairs are more numerous; pygidium, abdomen, and legs with similar appressed whitish hairs, pectus clothed with a light fulvous pubescence; the claws of the four anterior legs are double and unequal, those of the posterior single, and none are cleft.

Length 7 mm.; width $3\frac{1}{2}$–4 mm.

*Hab.* Cape Colony (? Cape Town).

NANAGA, n. gen.

Mentum broad, somewhat short, ovate, not deeply constricted laterally at the point of insertion of the antennæ; upper lobe of maxillæ a little elongate, fasciculate at the tip, armed inwardly with five teeth, the three apical ones arranged transversely at the tip; apical joint of labial palpi swollen at the base, moderately acuminate towards the apex, that of the maxillary sub-cylindrical; clypeus slightly attenuate laterally, straight at the tip and with the angles distinct although slightly rounded, not plainly divided from the head by a suture; antennæ nine-jointed, basal joint strongly turbinate, club a little longer than all the other joints taken together; prothorax longer than broad, narrowed laterally in the anterior part, sinuate in the posterior and with the basal angle sharp; scutellum short, triangular; elytra moderately sinuate laterally, plainly narrowed towards the apex, and leaving the greater part of the propygidium uncovered; pygidium of the male steeply slanting forwards; abdomen compressed; anterior legs bi-dentate, basal tooth very short but oblique; posterior legs robust, tibiæ triangularly dilated at apex, tarsi long; all the claws double, unequal, the more robust one cleft at the tip.

NANAGA ELEGANS, n. spec.

Male: Black, opaque on the upper side, slightly metallic underneath and on the legs, prothorax and elytra closely and distinctly shagreened, head and clypeus strongly scabrose; antennæ also black but with the club slightly rufescent; prothorax clothed with a very long, ashy-grey, erect pubescence; scutellum pubescent; elytra very briefly pubescent, the pubescence is sub-erect and silky, greyish white and a little more abundant along the suture, the base is setulose; pygidial part, abdomen, and pectus clothed with a greyish-white pubescence; hind femora somewhat robust, hind tibiæ shorter than the femora, dilated at the apex, and having a long apical spur; all the claws are double and unequal, the shorter one being about three-fourths of the length of the other, which is cleft, but in the intermediate legs only is the shorter one slightly cleft.

Female unknown.

Length 5½–6 mm.; width 2½ mm.

*Hab.* Cape Colony (Stellenbosch).

## GEN. CYLICHNUS, Burm.,
Handb. d. Entomol., iv., 1, p. 171.

Mentum slightly longer than broad but very broadly ovate, gradually narrowed at the apex where it is distinctly tri-dentate and not penicillate, the maxillæ are short, very robust, concave at apex and armed there with four very strong teeth the upper one of which is deeply bifid; joints of labial palpi short, robust, apical one elongate, ovate, last joint of the maxillary nearly as long as the two preceding, fusiform outwardly only; clypeus transverse, slightly concave with the anterior margin reflexed, nearly straight at apex and with the outer angles slightly rounded; eyes very large; antennæ nine-jointed, club long, flabellate; prothorax nearly twice as broad as long, obliquely attenuate laterally towards the anterior part for more than half the length, bi-sinuate along the base; elytra a little longer than the prothorax, not sinuate or attenuate laterally towards the apex, and not very convex; pygidium sub-vertical in the male, more horizontal in the female; anterior tibiæ tri-dentate outwardly, the two lower teeth are set very close to the apex, the basal one is broadly separated from the others, the intermediate one is set at right angles with the tibia, and there is no apical spur; the posterior tibiæ are compressed, distinctly bi-carinate on the upper side, and the carinæ are serrulate; all the claws are double and unequal, but the

shorter tooth is more than half the length of the other (*pilosulus*) or nearly as long (*neglectus*, *vanus*) and slightly cleft at the tip.

Burmeister has seen only one example of this genus, and did not dissect the mouth parts, perhaps he was not allowed to do so. This would account for the discrepancy between his description and mine. My example, however, came from Drège, and I have some reason to believe that it is the identical female examined by Burmeister.

This genus is very well characterised by the peculiar shape of the mentum and by the tibiæ being bi-carinate on the upper side. It is purely South African.

*Key to the Species.*

Head and prothorax black, with the elytra dark chestnut-brown and roughly coriaceous .. .. .. .. .. .. .. .. .. .. .. .. .. *pilosulus.*

Head black, prothorax and elytra chestnut-brown and both closely punctulate .. .. .. .. .. .. .. .. .. .. .. .. .. .. .. *illotus.*

Whole body light testaceous, prothorax extremely closely punctured, the punctures minute and irregular; elytra also very closely punctured, the punctures round and somewhat deep in the male, broader and more cicatricose and enclosing a smaller puncture in the female .. .. .. *vanus.*

### Cylichnus pilosulus, Burm.,
### Handb. d. Entomol., iv., 1, p. 172.

Head and prothorax black, elytra and under side chestnut-brown, legs testaceous; head very rugose, almost roughly foveolate, clypeus straight at the apex and with the angles slightly rounded, reflexed at tip, somewhat concave and covered like the head with a sub-flavescent pubescence; prothorax transverse, nearly twice as broad as long, attenuate diagonally towards the apex for about half the length, granulose and set with long, sub-appressed, sub-flavescent hairs; scutellum somewhat short, triangular; elytra sub-parallel, rounded behind, not sinuate laterally, plane rather than convex, pluri-costate on each side, but the costæ not very plain, covered with transverse, closely set, somewhat irregular scar-like impressions, and clothed with dense sub-erect greyish hairs; under side and legs finely pubescent; claws of all the legs double, unequal, the smaller claw is not quite as long as the stronger one and is briefly bifid at the tip.

Length 7½ mm.; width 4 mm.

*Hab.* Cape Colony (no exact locality).

### Cylichnus neglectus, n. spec.

Testaceous brown, covered with very fine, minute, sub-flavescent hairs not set sufficiently close to each other to form a pubescence on

the upper side; shape and sculpture of the head and clypeus similar to that of *C. pilosulus;* the prothorax is covered with nearly confluent punctures separated by irregular, not scabrose walls, the punctures do not bear each a short, appressed hair, and are equidistant and somewhat remote; the elytra, including the greatest part of the suture, are pluri-costulate and covered with nearly contiguous punctures the irregular walls of which make the surface appear shagreened, and each puncture bears a minute appressed sub-flavescent hair; the pygidium is briefly pubescent all round, but has on the surface hairs similar to those on the elytra, and those on the under side, especially on the abdomen, are alike; the claws of all the legs are double and unequal, but the smaller one is nearly as long as the stronger, and all are slightly bifid at the tip.

Length 8 mm.; width 4 mm.

*Hab.* Transvaal (Potchefstroom).

CYLICHNUS VANUS, n. spec.

Male: Head black with the clypeus slightly brown, prothorax and elytra chestnut-brown, but with the median anterior part of the former a little infuscate; both the head and clypeus are equally shagreened, the clypeus is short but broad, straight at the apex and with the outer angles slightly rounded, and is divided from the head by a conspicuous transverse carinule; prothorax very finely punctured, the punctures are very dense, and among them are some large ones bearing each a very short, appressed greyish hair; prothorax with hardly any puncture; elytra elongate, only slightly broader than the prothorax at the base but broader at the apex, plainly bi-costate on each side, but having also a less well-defined third discoidal costule, the suture is raised, and it is covered by very closely set punctures bearing each a minute greyish flavescent appressed hair; pygidium, abdomen, and hairs with similar hairs which are not, however, so closely set; legs testaceous.

Female: The female is very different from the male; it is reddish brown all over, the prothorax has much more numerous cicatricose punctures and the elytra are covered with broad very closely set punctures having a smaller one in the centre, these punctures are more cicatricose in the anterior than in the posterior part, the appressed hairs are considerably less dense and are finer.

Length 9 mm.; width 5 mm.

*Hab.* Cape Colony (Transkei).

This insect somewhat resembles in general appearance some species of *Congella.*

## RABULA, n. gen.

Mentum and palpi of *Hoplia*, the maxillæ are also similar in shape, and six-dentate inwardly, but the two upper teeth are longer than the others and project obliquely above them; clypeus a little rounded laterally, tri-dentate at the apex, separated from the head by a suture; antennæ nine-jointed; prothorax transverse, a little rounded laterally; grooved longitudinally in the middle, base slightly bi-sinuate; elytra elongated, not much broader than the prothorax at the base, but a little wider at the apex, moderately callose at the shoulder, and more distinctly so at the apex, hardly convex and covering the edge of the pygidium which is broad and vertical in the male; legs moderately slender, and without an apical spur; hind tibiæ slightly compressed inwardly; claws of the four anterior legs double, unequal, the smaller one somewhat divaricating, all simple, those of the hind legs single and also simple; no apical spur to the posterior tibiæ.

### *Key to the Species.*

Clypeus not excavate and plainly tri-dentate in front .. .. .. .. *morosa.*

Clypeus deeply excavate, and simple in front .. .. .. .. .. .. *marqueza.*

### RABULA MOROSA, n. spec.

Fuscous brown, opaque, clothed with some slightly remote, appressed minute ashy-grey hairs; clypeus sub-granulose, a little rounded near the base, slightly obliquely attenuate thence and plainly and somewhat sharply tri-dentate at the apex, head and prothorax covered with cicatricose shallow punctures from the centre of which springs a very short bristle; the prothorax has a shallow but plainly visible longitudinal furrow; scutellum with a few small appressed hairs; elytra plainly tri-costate on the discoidal part and having in addition another costa above the outer margin, the suture is also raised, and the sculpture consists of closely set cicatricose punctures a little more closely set than on the prothorax, and bearing likewise a very small appressed hair, but the costæ and the suture have in addition a series of distant, short bristles; pygidium and abdomen aciculate, especially the former, and with scattered minute hairs; legs punctate and with similarly appressed hairs; they have no apical spur, the anterior tibiæ are tri-dentate, the three teeth are set close together and very oblique, none of the claws is cleft, those of the four anterior ones are double and unequal.

Length 7 mm.; width $3\frac{1}{2}$ mm.

*Hab.* Cape Colony (Worcester).

RABULA MARQUEZA, n. spec.

Female: Dark chestnut-brown; clypeus straight laterally and in front, but broadly rounded on each side, very deeply hollowed, with the margins slightly reflexed, and divided from the head by a distinct raised line, it is granulose, but the head is finely punctured; prothorax very obliquely attenuate laterally from the anterior to the median part, ampliated and rounded thence to the base, very finely punctulate, without any traces of larger punctures, and having some appressed squamulose hairs short and not set close to each other; scutellum with a few squamose hairs; elytra a little broader at the base than the base of the prothorax, but not broader than the latter at its widest part, a little ampliated from the shoulder to the apex, moderately convex, plainly tri-costate on each side, the suture is a little raised, the two intermediate spaces between the suture and the second costa are also slightly raised in the centre, they are very coriaceous, and moderately densely clothed with small, not closely set squamulose greyish scales; the hind tibiæ have a small, apical spur, and the double but unequal claws of the anterior and intermediate legs are strongly diverging.

Length 8 mm.; width 5 mm.

*Hab.* Mozambique (Lourenço-Marquez).

CONGELLA, n. gen.

Mentum broadly grooved longitudinally in the anterior face, ovate laterally and very plainly attenuated towards the apex where it expands, the angles are rounded, not penicillate, and the apical part is somewhat broadly sinuate, maxillæ robust, moderately elongated, inner lobe indistinct but ending into a sharp tooth, upper lobe horny, short not penicillate at the apex, concave and armed inwardly with six sharp, powerful teeth, apical joints of the labial and maxillary palpi elongated, fusiform; clypeus short, nearly parabolic but a little obtuse in the median anterior part, not plainly separated from the head by a suture: antennæ ten-jointed, basal joint gradually thickened from base to apex and as long as the seven following joints taken together, second joint strongly moniliform, the other four conical and of nearly equal length, seventh aculeate underneath, the three-jointed club moderately small, elongato-ovate; eyes large, deeply divided by the canthus of the genæ, prothorax short but broad, rounded laterally, base not arcuate but slightly bi-sinuate; scutellum short, ogival; elytra broader than the prothorax, sub-parallel, a little convex in the dorsal part, slightly callose on each side near the apex, not sinuate nor attenuate laterally, covering the

propygidium; pygidium sub-vertical in both sexes, abdomen not contracted; anterior tibiæ tri-dentate outwardly, with the teeth nearly equi-distant and oblique, sharply truncate inwardly and having an apical spur in the female only, legs slender, moderately long, tarsi as long as the tibiæ or nearly so, the four anterior claws double, unequal, slightly cleft at the tip, and divaricating more than in the other genera of this tribe, hind ones single, simple, long and not very robust.

This genus differs from *Hoplia* in the parabolic shape of the clypeus and the ten-jointed antennæ in both sexes; and in the legs having an apical spur in the female; unlike *Hoplia* the body has no scales, but sometimes short squamose hairs, and the general appearance reminds one of some species of *Adoretus*. Several Madagascar species, *Hoplia plagulata*, Fairm., among others, will probably be included in this genus.

### *Key to the Species.*

Upper side clothed with very closely set greyish squamose hairs, elytra closely punctate; all the tibiæ with an apical spur in the female.

Prothorax laterally ampliate and rounded in the middle. . . . . *tessellatula.*
Prothorax laterally ampliate and bluntly angular in the middle. *mashunensis.*

Upper side sparingly clothed with not closely set greyish hairs; elytra covered with scar-like very closely set punctures, the four posterior tibiæ of the female with an apical spur; colour chestnut-brown . . . . . *valida.*

Upper side with sparse minute greyish hairs, elytra with not very closely set scar-like punctures, colour piceous-black . . . . . *nigrita.*

### Congella tessellatula, n. spec.

Fuscous brown, with the head black and the legs, especially the anterior ones, redder, covered on the upper and under side, and also on the legs with dense, ashy-grey, minute, appressed, slightly squamulose hairs; clypeus rounded and attenuated laterally, apical part plainly emarginate, the whole head is granulose, the granules not set close to each other; prothorax twice as broad as long, ampliated and rounded laterally in the middle, but a little more obliquely attenuated in the anterior than in the posterior part, very finely aciculate and bearing also cicatricose marks having a median puncture from which springs a minute hair; scutellum covered with similar hairs; elytra oblong, but slightly wider at the apex than at the base, somewhat plainly tri-costate on each side and

having in addition a supra-marginal costule, they are finely coriaceous, and very densely hairy, but these hairs are sometimes wanting on the costæ at regular intervals, and gives thus to the elytra a sub-tessellated appearance; pygidium broad, vertical in both sexes.

In the male the slightly squamulose hairs are denser than in the female, and the latter has an apical spur to all the legs.

Length 8 mm.; width 9 mm.

*Hab.* Cape Colony (Port St. John, Kowie), Natal (Durban).

### Congella mashunensis, n. spec.

Male: Colour, sculpture, and vestiture of *C. tessellata;* the head and clypeus are similar, but the prothorax is more angular laterally at middle and more obliquely attenuated thence towards the basal angle; the elytra are much more plainly tri-costate on each side, and the intervals are deeper, but the minute scale-like hairs are identical.

Length 9 mm.; width 5 mm.

*Hab.* Southern Rhodesia (Salisbury).

### Congella valida, n. spec.

Reddish brown, sometimes slightly infuscate; head with scattered granules, clypeus parabolic but a little blunt at the tip; prothorax as in the preceding species, but the space among the scar-like punctures are plainly wrinkled or rugose; the elytra are similarly costate, the hairs are not so dense, but longer and less squamulose, and the sculpture consists of contiguous impressed punctures having in the centre a smaller one emitting a hair; these hairs are similar on the upper and under sides and also on the legs as well as on the pygidium, the latter is granulose and has a median longitudinal furrow; in the male the legs have no apical spur, but in the female the four posterior legs are provided with one.

Length 11–12½ mm.; width 6½ mm.

This species is much more massive than *C. tessellatula*, and the vestiture is not much denser in the male than in the female.

### Congella nigrita, n. spec.

Intermediate in size between *C. tessellatula* and *C. valida;* the colour is black on the upper side, piceous red underneath, and the prothorax and elytra bear minute, scattered, greyish appressed hairs; the shape and sculpture of the head are the same as in *C. valida*, but on the prothorax the cicatricose punctures are deeper;

the scutellum is not so sharply ogival and is shagreened; the elytra are somewhat plainly quadri-costate on each side, and also deeply cicatricoso-punctate, but these punctures are not set close to each other, and are somewhat obliterated in the posterior part of the costæ; the pygidium is shagreened and has a distinct longitudinal smooth and shallow median furrow, the appressed hairs on it as well as on the abdomen are very minute and equally distant, and the posterior tibiæ of the male, the only sex known to me, are a little more robust than in the two preceding species.

Length 9 mm.; width 5 mm.

*Hab.* Cape Colony (exact locality unknown).

The example from which this description is made was sent to me by the late Dr. Dohrn, of Stettin, and came from either Zeyher or Drège.

## KAREIGA, n. gen.

Mentum ampliate laterally, not wider at the base than at the apex, hardly longer than broad, incised laterally near the point of insertion of the palpi, semicircularly emarginate at apex; labrum vertical, arcuately emarginate; palpi of *Hoplia;* maxillæ short, very robust, upper lobe armed with two short, robust, bifid teeth somewhat blunt and set somewhat in the inner edge, mandibles sharply bi-carinate on the outer face, concave between the two carinæ, falcate at the tip and slightly bifid inwardly; antennæ ten-jointed, basal joint long, clava as long as all the intermediate joints taken together; head somewhat broad and having distinct genæ the canthus of which divide nearly equally the anterior part of the large eyes, clypeus transverse, not so broad as the head, rounded laterally and deeply emarginate in the centre; prothorax short, twice as broad as long, crenulate laterally, very little sinuate along the base; scutellum somewhat short, broadly ogival; elytra plane in the anterior part, slightly broader at the base than the base of the prothorax, subparallel; pygidium vertical; anterior and intermediate tarsi longer than the tibiæ, posterior ones not longer, claws double, unequal, and simple, the inner one of the posterior legs very short; anterior tibiæ tri-dentate, the teeth broad, turned slightly downwards, intermediate and apical ones connate; intermediate and hind tibiæ with two series of closely set, short, serrate teeth on the upper side; all tibiæ with a spur in the female, the joints of the tarsi are very villose and densely bristly underneath.

The only species included in this genus has the general appearance of an *Empecta* (MELOLONTHINÆ), but the elytra are more depressed.

KAREIGA HYPOCRITA, n. spec.

Female: Dark brown, clothed with squamiform, elongate white hairs; antennæ flavescent; clypeus short, but broad, rounded laterally, arcuately emarginate in front and with the margin somewhat reflexed, it is deeply and roughly punctate and granulate, and the head is very closely granoso-punctate, each puncture bearing a short hair; prothorax ampliated and rounded a little past the median part, more obliquely attenuated thence to the anterior angle than in the posterior part which is slightly sinuate and is not serrate like the anterior, twice as broad as long, not much convex and clothed with nearly coalescing, fine, but somewhat deep punctures, and covered, but not densely, with somewhat long, white squamose hairs; scutellum deeply and irregularly punctured and with a few hairs; elytra sub-parallel, very little ampliated past the middle and having on each side two dorsal costules, they are covered with oblong punctures separated from one another by a space equal to their size and enclosing a smaller round puncture bearing an appressed white, somewhat scale-like hair; propygidium, pygidium, and abdomen irregularly aciculate and having scattered hairs; pectus and legs setulose; anterior and intermediate tarsi longer than the tibiæ, villose and densely bristly under the joints; female with a conspicuous spur on the posterior tibiæ.

Length 14 mm.; width 7½ mm.

*Hab.* Cape Colony (Graham's Town).

## GEN. HOPLIA, Illig.,
## Mag., ii., 1803, f. 226.

Mentum ampliate ovate, deeply narrowed laterally towards the apex, deeply emarginate there with the angles rounded and not penicillate, convex and not grooved in the anterior face; maxillæ broad, arcuate, inner lobe indistinct, upper one short, not penicillate at the tip and armed with five or six sharp inner teeth, apical joint of labial palpi moderately long, slightly arcuate and a little swollen outwardly, that of the maxillary sub-cylindrical, moderately acuminate at the tip; clypeus transverse, nearly straight laterally with the angles slightly rounded, and emarginate at the apex; antennæ nine-jointed in both sexes; prothorax transverse, ampliated and rounded laterally in the middle; scutellum short, ogival; elytra with a distinct humeral and apical callus, slightly ampliated behind and covering the propygidium; anterior tibiæ tri-dentate outwardly but without an inner apical spur; legs not robust, short; claws of

the four anterior legs double, unequal, and slightly cleft, the hind ones simple; pygidium broad, vertical in both sexes; body scaly.

The genus has a very wide distribution. In the South African species, from which I have drawn this generic description, the female only has a small inner spur on the four hind tibiæ.

HOPLIA SORDIDA, Burm.,
Handb. d. Entomol., iv., 1, p. 196.

Chestnut-brown, upper side partly covered in the male with whitish scales, and completely in the female with flavescent ones, under side and legs with silvery white scales in both the sexes.

Male: Head scaly, clypeus broad, transverse with the outer angles slightly rounded, and emarginate in the middle of the apex; prothorax twice as broad as long, ampliated and rounded laterally in the median part, and having five bands of ovate, non-carinate white scales, the two lateral ones of which do somewhat commingle, and spatuliform, short, erect and distant hairs; scutellum scaly; elytra with a humeral and median basal callus on each side and an apical median one, they are not costate, but there is a longitudinal impression between the two basal calluses and they are partly covered with somewhat closely set ovate white scales, from among which spring spatuliform erect black hairs which here and there form irregular fascicles, especially in the median part of the disk, they are a little broader than the prothorax and gradually ampliated towards the apex where they are plainly wider than at the base.

Female: Like the male, but a little more massive and entirely covered on the upper side with carinate scales more elongate on the head and prothorax than on the elytra where they are ovate, the elytra are also more plainly bi-costulate, and they have regular rows of distant spatuliform hairs with occasionally short fascicles as in the male.

Length $6\frac{1}{2}$–8 mm.; width 4–5 mm.

*Hab.* Cape Colony (Uitenhage); Natal (Durban); Transvaal (Lydenburg).

(*Species which I have not seen or been able to identify.*)

HOPLIA CILIATA, Casteln.,
Hist. Natur. d. Insect., ii., p. 144.

"Black, prothorax with very short yellow hairs arranged along the sides and forming in the centre a longitudinal line, on each side of the prothorax are long brownish ciliæ; elytra brown, set with

scattered short whitish-yellow hairs; scutellum and sides of the abdomen yellowish; legs brown, hind legs black.

Length 3 lin.; width $1\frac{1}{4}$ lin.

*Hab.* Cape of Good Hope."

Hoplia caffra, Burm.,
Handb. d. Entomol., iv., ii., p. 484.

"Broad, black, shining, punctate, setose; anterior tibiæ tri-dentate; claws cleft, posterior ones simple.

Length 4 lin. ♂.

From Caffraria. Received from Herr Zeyher. Similar to *Hoplia morio* (from Madagascar), but much broader, black, shiny, punctate, and having a small whitish hair in each puncture; the hairs on the under side are broader and more scale-like; antennæ small, brown; legs thick, strong, but not very long; anterior tibiæ with three thick obtuse teeth, the claws brown, all cleft, only the hind ones simple, no spur on the tibiæ."

*Congella tessellatula* may perhaps prove to be identical with this species.

Gen. MICRODORIS, Burm.,
Handb. d. Entomol., iv., i., p. 32.

"Body tolerably slender on the whole, somewhat flattened but rotundate and more than twice as long as broad; the head is flat and disk-like, rounded in front, slightly reflexed, and decidedly larger in the male than in the female; the antennæ are ten-jointed, but without sexual differences. The quite soft, almost membranous labrum and similarly constructed mandibles are not distinguishable externally but are hidden deep under the widely projecting margin of the head, the under jaw and under lip are also delicately formed, and this may be the reason why I could perceive no membranous bi-lobate ligula at the end of the ligular portion, which, however, is not fused with the mentum; galea of the maxillæ small, toothless, and with a long pencil of hairs; the thin slender palps project far forwards; end joint of labial palpi ovately swollen; pronotum about as broad as long, somewhat swollen at the sides, but not broader behind than in front; scutellum small, cordate; elytra broader at the base than the prothorax, not narrowed behind, but rounded apically; legs short, not very strong; anterior tibiæ with three outer teeth, somewhat weak in the male, the four posterior tibiæ have an apical spur, but not the anterior ones; tarsi only

as long as the tibiæ, bristly like them, and having large claws; in the four anterior feet both claws are of equal size, strongly divergent, (owing to the thick but non-setigerous after-claw which intrudes itself between them at the base), and end in a blunt apex alongside of which a sharp, shorter cleft tooth is present internally; posterior tarsi with a long, cleft, always folded claw, pygidium in the male perpendicular and not drawn in, but projecting more posteriorly in the female. Whole upper surface shiny, with solitary hairs. Only one species from South Africa."

MICRODORIS AQUILA, Burm.,
Loc. cit., p. 33.

"From Drège. Surface of head densely and coarsely punctate, the vertex almost black, with yellow hairs, prothorax very shiny, with scattered punctures and with long yellow bristles at the sides; scutellum tolerably covered with yellow hairs. Elytra shiny, brown, and with punctures set in irregular rows which bear appressed yellow bristly hairs; under surface, legs, antennæ, and palpi pale yellow, shiny, with scattered bristles; the hairs on the sternum are shorter and appressed, those at the anal margin forming long ciliæ.

Length 3 lin."

I do not know this genus, which Lacordaire places in the *Hoplides* group.

## APPENDIX.

## Sub-Family RUTELINÆ.

The present part of this Catalogue was in the hands of the printers when Mr. G. A. Arrow published, in the February number of the 'Annals and Magazine of Natural History,' 1902, Ser. 7, vol. 19, a paper on "Rutelid and Melolonthid Beetles from Mashonaland and East Africa." This paper contains the description of some species which I described under another name, and also one addition. Mr. Arrow's names have, however, the priority, and must take the place of mine. I am indebted to Mr. G. A. K. Marshall for the loan of five of the co-types of the species mentioned.

## Tribe ADORETINI.

### Gen. ADORETUS.

*Adoretus sebakuensis*, Pér., Catal. Scarab., p. 578 = *A. uniformis*, Arrow, loc. cit., p. 91.

*Adoretus zambesianus*, Pér., loc. cit., p. 576 = *A. ovatus*, Arrow, loc. cit., p. 92.

The examples of this species which I first examined had no trace of the three rows of the patches of yellowish-white agglomerated hairs on each side of the elytra; in fresh examples received since these rows are very conspicuous; in others they are partly obliterated in the anterior part, but there is always a large, juxta-sutural patch on each side of the apex. This species is recorded from the Transvaal (Lydenburg).

*Adoretus salisburiensis*, Pér., loc. cit., p. 571 = *A. plumbicollis*, Arrow, loc. cit. p. 93.

In the two examples from which my description was made the four rows of distant, whitish bristles on each elytron were not very distinct; but in all the examples received since, these rows are very plain. The species is also recorded from the Transvaal (Lydenburg, Waterberg).

*Adoretus albolepidus*, Arrow, loc. cit., p. 92 = *A. hoplioides*, Bohem.

Boheman records this species from Port Natal, but although the three bands of white hairs on the prothorax are less conspicuous (and even sometimes nearly obliterated) in specimens from that locality than in those from the Transvaal (Potchefstroom, Lydenburg, Zoutpansberg), or from Southern Rhodesia, there is no doubt that the two species are one, and this is also proved by the shape of the genital armature of the male.

## Tribe ANOMALINI.

### Gen. POPILLIA.

*Popillia eupyga*, Arrow, loc. cit., p. 91.

Elongated, black, shining, hirtose; elytra testaceous with the margins infuscate; head rugose everywhere on the upper side, margin of the clypeus very little reflexed; prothorax nearly as long as broad, strongly narrowed in the anterior part, and with the posterior angles obtuse, hind margin broadly excised in front of the scutellum, discoidal part coarsely strigoso-punctate, clothed, but not thickly, with whitish hairs, but having a median line and two lateral spaces with the exception of a median punctiform fascicle, denuded; elytra glabrous, strongly attenuate behind, bearing six remote striæ, the second stria strongly flexed in the middle; the punctate pygidium is adorned with four white fascicles; the propygidium with two transverse ones; whole pectus and all the posterior part abdominal segments hairy-white; legs black, anterior tibiæ bi-dentate, meso-sternum quadrate in front, not projecting; antennæ black.

Length 10 mm.; width 5 mm.

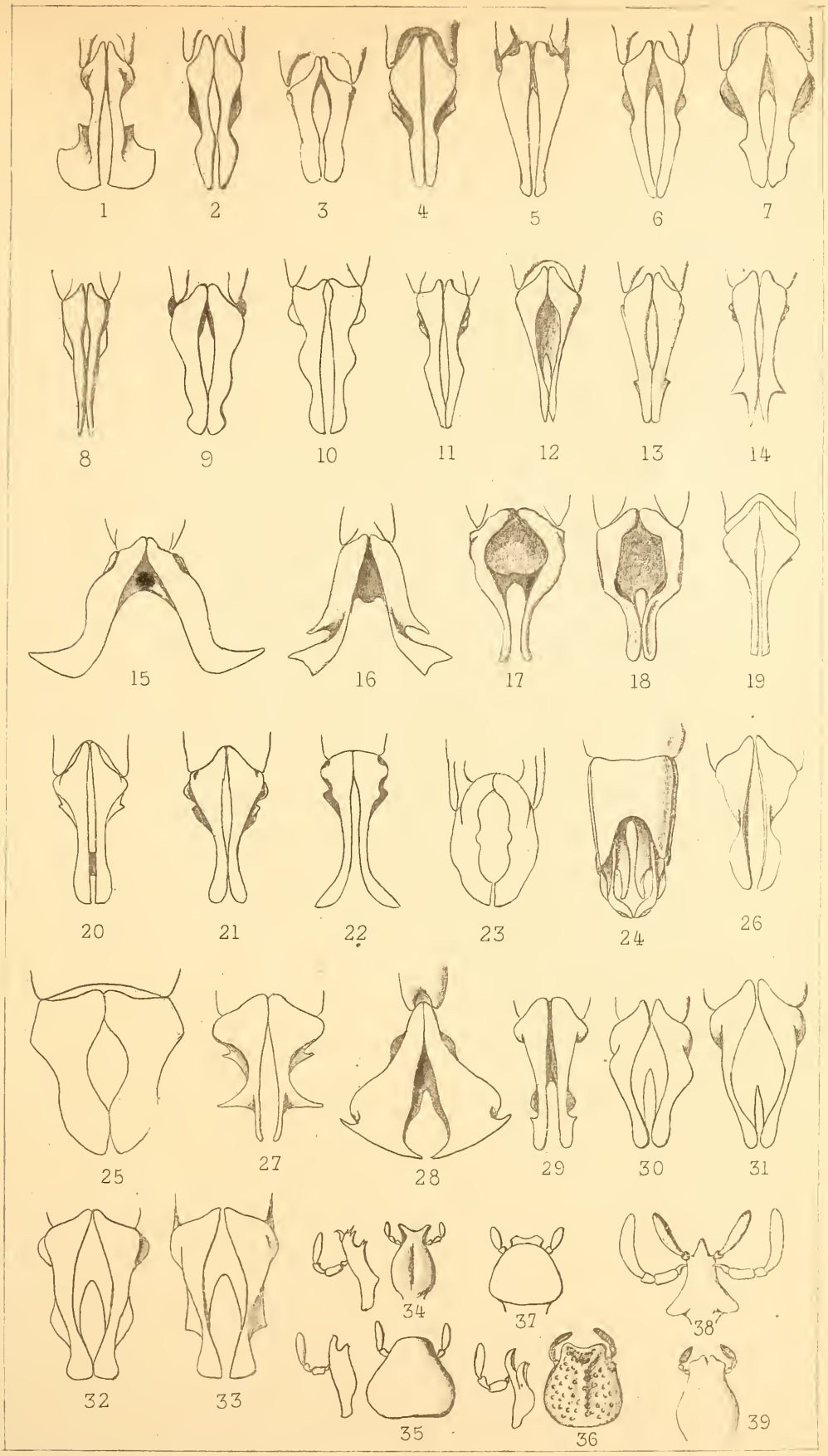
*Hab.* Mashonaland (Salisbury).

I have seen one example of this interesting species, which differs from the other South African ones by the very convex, yet very sloping, pygidium which is ornamented with four hairy patches.

## Tribe PHÆNOMERIINI.

### Gen. PHÆNOMERIS.

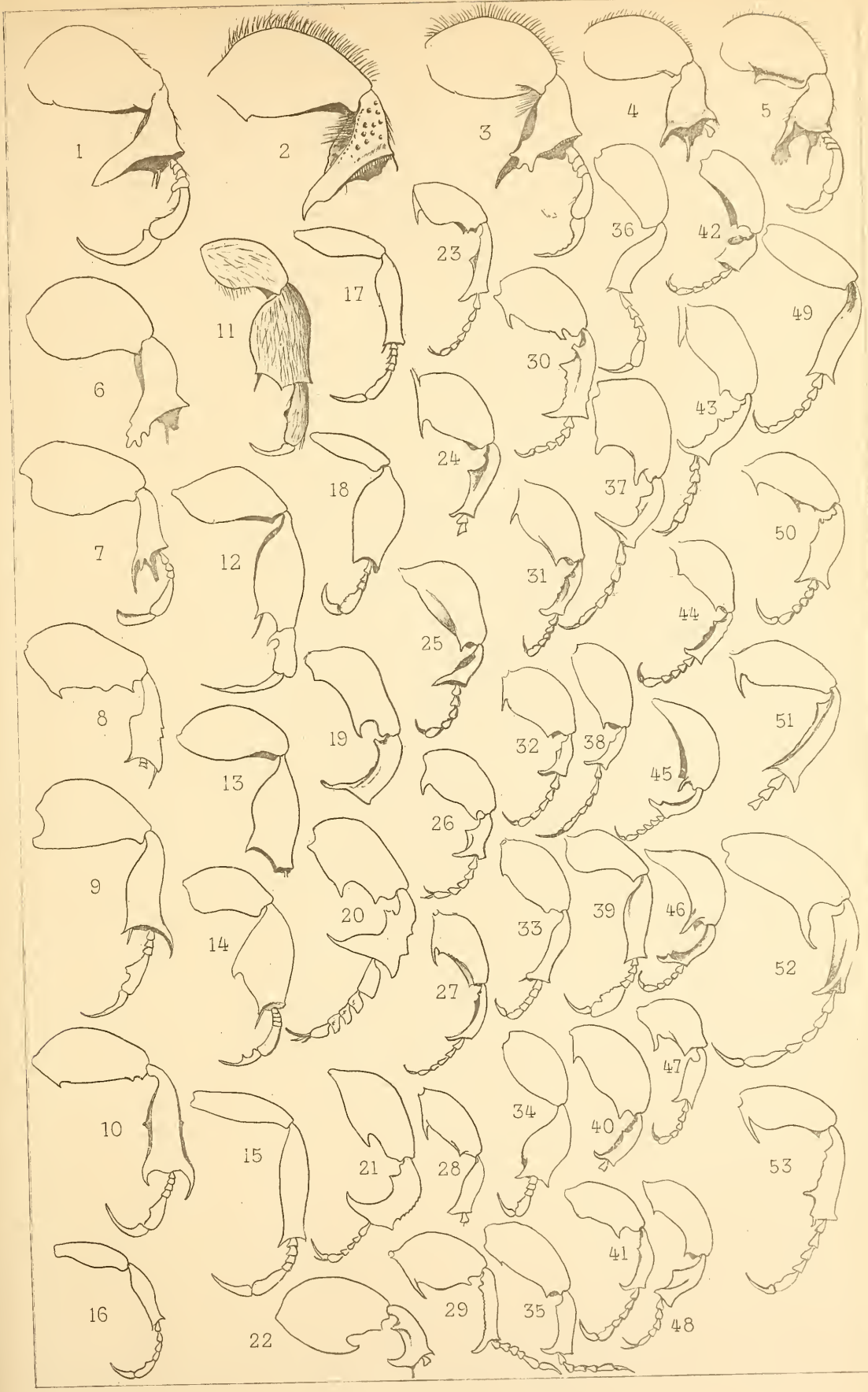
Mr. Arrow identifies as *P. rufipennis*, Branes., loc. cit., p. 91, the species which I take to be *P. magnifica*, Hope, and to which I doubtfully referred the former.




Hèliog. Dujardin, Paris

Léonard, A. Brimble, del.

DESCR. CAT. S. AFR. COLEOPTERA. PL. XLII




Heliog. Dujardin Paris

## Sub-Family COPRINÆ.

### SCARABÆINI.

#### Gen. SCARABÆUS Lin.

Scarabæus canaliculatus, Fairm., p. 56.

I have been able, through Mons. Fairmaire's courtesy, to examine the type of this species. Its nearest ally is *S. flavicornis*, but it is twice as large, and the pubescence on the legs is fulvous brown; the punctures on the centre of the disk are equally deep but more closely set, and the sides as well as the anterior part are more scabrose, the smooth median longitudinal line is less regular; the costæ of the elytra are still sharper and more raised than in *S. flavicornis*, and are not punctulate.

#### Gen. SISYPHUS, Latr., p. 98.

I have been able, through the kindness of the authorities of the Genova Museum, to examine some of Gory's types of this genus belonging to that Institution, and as a result of this examination I have come to the following conclusions:—

*Sisyphus appendiculatus*, Bohem., is the same species as *S. quadricollis* and *S. hessi*, Gory, as stated by me, p. 103.

*Sisyphus crispatus*, Gory, is the same species as *S. hirtus*, Gory. The name of *S. goryi*, proposed by Harold as a substitute for *S. hirtus*, this name having been already used for a species of the genus, must therefore be dropped, and that of *S. crispatus* retained.

*Sisyphus spinipes*, Gory (?=*S. spinipes*, Thunb., teste Harold), is a very different species from the one I described under that name, and which I now take to be, perhaps wrongly, *S. rugosus*, Gory, but the type of this species is no longer to be found.

*Sisyphus capensis*, Gory, Monogr., p. 12, pl. i., fig. 8 is no longer in the Gory Collection. I have not been able to identify the species.

Sisyphus spinipes, Gor.,
Monogr., 1833, p. 8, pl. i., fig. 4.
? *S. spinipes*, Thunb., Mém. Ac. Petr., vi., 1818, p. 411.

This species belongs to the sections $A^2$ and $B^2$ of the genus (*vide* p. 100). The shape and colour are those of *S. quadricollis*, the vestiture is the same, but the shape of the intermediate and posterior legs is different; the anterior tibiæ are bi-dentate underneath, the intermediate femora are plainly scooped underneath towards the apical part, and between this incision and the knee

there is a long, curved, bi-sinuate tooth, the intermediate coxæ are conspicuously curved inwardly in the basal part, and the inner margin laminate from the apical part of this curve to the apical spurs, with the upper angle of the lamina sharp or dentate, the crenulate outer margin is deeply incised at about the median part, and the upper angle of the margin is prolonged into a long, oblique spine; the point of the trochanters of the hind femora does not project much, the femur bears a very distinct, vertical tooth at a short distance from the knee; the hind tibiæ are moderately arcuate, and very little incurved at the apex.

Length 12 mm.; width $6\frac{3}{4}$ mm.

The insect from which this description is made is labelled: "*Sisyphus spinipes*, Gory. Cap. B.E. Collection Jurine." In the figure given by Gory the shape of the intermediate legs is about correct, but not that of the hind ones.

Raffray described and figured under the name of *S. tibialis* an insect from Abyssinia which seems to be closely allied to *S. spinipes*.

## COPRINI.

### Gen. MACRODERES, Westw., p. 297.

Owing to the kindness of the Brussels Museum authorities I have been able to examine two of de Borre's species (types) of this genus.

### Macroderes politulus, Borre, p. 301.

The example I have described anew under this name is absolutely similar to de Borre's type, and is also a female. This is evidenced by the arcuate frontal carina of the head.

### Macroderes westwoodi, Borr., p. 302.

This species is a very distinct one; the inner spur of the anterior tibiæ is very long, straight, and bent at right angles near the tip; the frontal ridge of the head is very little raised, slightly arcuate, and is provided in the centre with a plain, rounded tubercle; the prothorax is covered by punctures separated from each other by a space equal to the diameter of a puncture, but they are slightly more broadly scattered in the posterior part; the elytra are finely striate, and the intervals which are nearly plane and are provided with a waving, plicate row more shiny than the background, on the sides this row resembles somewhat a series of shallow foveæ without wall on one side; the supra-epipleural stria is very slender, and begins at the line of the first abdominal segment.

Gen. SAPRŒCIUS, p. 306.

I mention in the description of this genus, p. 307, line 10, that the joints of the intermediate and posterior tarsi are fused and vary in number from two to five. It is possible that in one of the species, *S. optatus*, the number of these joints as given by me is correct, for they agree in the two examples that I examined; but in the other species, *S. singularis*, one more example of which has lately reached me, both the intermediate and posterior tarsi are five-jointed; the examples previously received were mutilated.

Catharsius pandion, Har., p. 336.

I referred, with some doubt, this species to *C. melancholicus*, Boh. Although very closely allied, it may, however, be differentiated by the length of the supra-marginal carina of the elytra, which reaches in *C. melancholicus* to only one-third of the whole length of that part of the body, whereas in *C. pandion* it is very sharp for three-fourths of the length. The habitat seems, however, to be the same as that of *C. melancholicus*, but I have also received it from Lourenço-Marquez.

## Family HYBOSORINÆ.

Gen. ARÆOTANYPUS, Waterh.,

Ann. & Magaz. Nat. Hist., vol. xv., 4th ser., 1875, p. 404.

"Mentum quadrate, slightly rounded at the base, the anterior angles obliquely truncate; labium only slightly visible at the sides, on account of the mentum being truncate. Labial palpi very stout; the penultimate joint small, as long as broad; the apical joints large, ovate, scarcely truncate at the apex. Lobes of the maxillæ membranous, thickly clothed with stiff hair. Maxillary palpi with the apical joint four times as long as the preceding one, sub-fusiform, with the apex slightly truncate. Labrum transverse. Mandibles stout, much curved, with the apex acute; these with the labrum visible from above. Antennæ composed of eleven joints; the first joint large, stout; the second nearly globular; the third nearly as long as the first, but comparatively slender, sub-cylindrical; the fourth, fifth, and sixth shorter, the sixth obliquely truncate at the apex; the seventh transverse, narrowed at its base; the eighth very short, and almost confounded with the first joint of the club; the ninth, tenth, and eleventh joints forming a short, ovate club; the ninth, the largest, shining, and slightly embracing the tenth and eleventh, which are spongy. Eyes large, not divided by a canthus. Thorax transverse. Scutellum triangular. Elytra elongate, slightly rounded at the sides. Abdomen composed of six segments; the

basal one small and much hidden. Anterior coxæ rather large, conical. Metasternum short. Intermediate and posterior tibiæ furnished with two spurs at the apex, those of the intermediate pair being the longer; anterior tibiæ elongate, not much widened at the apex, with two strong teeth on the outer edge, and a smaller one near the base. Tarsi long and very slender, longer than the tibia, the anterior pair the longest, nearly twice as long as the tibia; the basal joint very short (club-shaped), not reaching beyond the apical tooth of the tibia; the second to fifth joints very long and slender, the fifth the longest. The claws very long, slender, very slightly curved, simple, about four-fifths of the length of the claw-joint."

Mr. Waterhouse adds that many of the characters of this genus suggest an affinity with *Serica*.

ARÆOTANYPUS BOOPS, Waterh.,
Loc. cit., p. 405.

"Piceous black, strongly punctate; head moderately large, plane, moderately closely punctate; eyes large, rounded; prothorax broader than the head, broader than long almost by one-half, slightly convex and only a little narrowed in front, strongly but moderately closely punctate; scutellum in the shape of an elongated triangle, almost smooth; elytra slightly broader than the prothorax, and twice and a half as long, slightly convex, irregularly punctured, the punctures close and deep, a little ampliated behind, attenuated arc-like towards the apex; legs long, anterior tibiæ tri-dentate outwardly, tarsi testaceous, very long, slender; claws slender, simple.

Length $2\frac{1}{2}$ lin.; lat $1\frac{1}{3}$ lin.

The clypeus is not separated from the forehead by any distinct line; it is transverse, and has the angles slightly rounded. The thorax has the anterior angles slightly prominent, scarcely acute; the sides are gently reflexed, very gently narrowed in front; the base is broadly lobed in the middle. The elytra are furnished with a stria near the suture. The under side of the body is very shining, not punctured. The three teeth on the outer edge of the anterior tibiæ are sharp, the basal one very small. The femora and tibiæ are furnished with long, delicate hairs. The tarsi are very slender, and have only one or two almost imperceptible hairs at the apex of the joints; the anterior pair are about four-fifths of the length of the elytra, and are relatively longer than the posterior tarsi; the basal joint is very short. The antennæ are short; the club short, ovate, its basal joint shining.

*Hab.* South Africa, Lake N'Gami."

I have not seen this species.

# CORRECTIONS.

Page 15, line 34, read *Hopliinæ* instead of *Melolonthinæ*.
,, 15, ,, 34, insert *some* before *Dynastinæ*.
,, 17, ,, 23, read *Pentodontoschema* instead of *Pontodontoschema*.
,, 17, ,, 40, read *A few* instead of *Many*.
,, 18, ,, 4, delete *Camenta*.
,, 19, ,, 3, read *membranaceous* instead of *membraceous*.
,, 21, ,, 27, read *Scarabæini* instead of *Ateuchini*.
,, 23, ,, 3, delete *z*.
,, 25, ,, 25, read *hottentorum* instead of *hottentotum*.
,, 40, ,, 18, add after *Méth.* *nec Bohem.*
,, 100, ,, 15, read *nanniscus* instead of *manniscus*.
,, 104, ,, 23, read *Sisyphus rugosus*, *Gor.*
,, 104, ,, 25, read *Monogr.*, *p.* 12, *pl. i.*, *fig.* 7.
,, 104, ,, 26, delete *S. spinipes*, *Gory*, etc., etc.
,, 110, ,, 2, read *five- or bi-jointed*.
,, 120, ,, 24, read *aygulus* instead of *aggulus*.
,, 130, ,, 5, add *O* before *innuus*.
,, 175, ,, 39, read *sugillatus* instead of *sigillatus*.
,, 307, ,, 17, read *posterior ones five-jointed* instead of *posterior ones four-jointed*.
,, 307, ,, 18, add *n. spec.*
,, 307, ,, 36, read *intermediate and posterior tibiæ five-jointed*, and delete the rest of the sentence.
,, 336, ,, 19, add *Fabric.* after *Copris Jacchus*.
,, 336, ,, 20, delete *Fabricius*.
,, 369, ,, 21, read *Key to the Genera* instead of *to the Species*.
,, 446, ,, 32, add *n. spec.*
,, 474, ,, 16, read *on the anterior* instead of *in the anterior*.
,, 493, ,, 23, read *numerously punctate striæ* instead of *numerous punctate stria*.
,, 503, ,, 33, read *pitchy black* instead of *patchy black*.
,, 508, ,, 2 from the bottom, read *Pentodontoschema*.
,, 509, ,, 14, insert a comma after *plains*.
,, 509, ,, 36, read *mandibles* instead of *maxillæ*.
,, 510, ,, 15, read *mandibles* instead of *maxillæ*.
,, 516, after line 4, add *Plate XL.*, *fig.* 3.
,, 517, line 26, delete *Plate XL.*, *fig.* 2.
,, 518, ,, 16, read *fig.* 2 instead of *fig.* 3.
,, 520, ,, 15, read *fig.* 9 instead of *fig.* 5.
,, 521, ,, 11, read *fig.* 7 instead of *fig.* 6.
,, 521, ,, 28, read *fig.* 5 instead of *fig.* 7.
,, 522, ,, 21, read *fig.* 11 instead of *fig.* 8.
,, 523, ,, 2, read *fig.* 10 instead of *fig.* 9.

Page 523, line 21, read *fig.* 6 instead of *fig.* 10.
,, 525, ,, 26, delete *Plate XL., fig.* 11.
,, 527, ,, 12, read *fig.* 13 instead of *fig.* 12.
,, 528, ,, 9, read *fig.* 12 instead of *fig.* 13, and add *fig.* 39.
,, 535, ,, 32, read *fig.* 22 instead of *fig.* 19.
,, 536, after line 32, add *Plate XL., fig.* 21.
,, 537, line 28, read *fig.* 19 instead of *fig.* 20.
,, 538, ,, 18, read *fig.* 20 instead of *fig.* 21.
,, 539, ,, 18, delete *Plate XL., fig.* 22.
,, 540, ,, 34, read *fig.* 24 instead of *fig.* 23.
,, 541, ,, 29, read *fig.* 25 instead of *fig.* 24.
,, 542, ,, 24, add *n. spec.*
,, 542, ,, 25, read *fig.* 23 instead of *fig.* 25, and add *fig.* 38.
,, 543, after line 23, insert *Plate XL., fig.* 29.
,, 544, ,, ,, 9, add *n. spec.*
,, 546, ,, ,, 11, add *Plate XL., fig.* 29.
,, 549, line 7, read *fig.* 31 instead of *fig.* 26.
,, 549, ,, 32, read *fig.* 30 instead of *fig.* 27.
,, 553, ,, 2, add *fig.* 36.
,, 554, ,, 8, read *fig.* 26 instead of *fig.* 29.
,, 555, ,, 4, add *n. spec.*
,, 555, ,, 5, delete *Plate XL., fig.* 30.
555, ,, 34, read *in which* instead of *on which.*
,, 556, ,, 11, read *fig.* 27 instead of *fig.* 31.
,, 557, after line 34, insert *Plate XL., fig.* 35.
,, 561, line 16, read *fig.* 33 instead of *fig.* 32.
, 569, ,, 19, read *capicola* instead of *testaceus.*
,, 570, ,, 28, read *capicola* instead of *testaceus*
,, 573, ,, 26, delete *and* before *the clypeus.*
,, 576, ,, 9, delete the comma after *hair.*
,, 588, ,, 3, read 29 instead of 28.
,, 598, ,, 4, delete *Plate XLI., fig.* 37.
,, 610, after line 21, insert *Plate XLI., fig.* 48.
,, 613, ,, ,, 12, insert *Plate XLI., fig.* 49.
,, 621, line 18, delete *Plate XLIII., fig.* 33.
,, 683, after line 25, insert *Plate XLII., fig.* 18.
,, 684, ,, ,, 23, insert *Plate XLII., fig.* 16.
,, 686, ,, ,, 1, insert *Plate XLII., fig.* 17.
,, 689, ,, ,, 32, read *fig.* 11 instead of *fig.* 4.

# EXPLANATION OF PLATES XXXI.–XLII. OF THE CATALOGUE (Plates I.–XII. of Vol. XII.)

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## Plate XXXI. (Pl. I., Vol. XII.)

No.
1. Colophon westwoodi.
2. Nigidius delegorguei.
3. ,, validus.
4. Xiphodontus antilope.
5. Scarabæus femoralis.
6. ,, cupreus.
7. ,, fritschi.

No.
8. Scarabæus galenus.
9. Sceliages adamastor.
10. Pachysoma æsculapius.
11. Gymnopleurus cælatus.
12. Anachalcos pumilus.
13. Pedaria tuberculata.
14. Coptorhina barratti.

## Plate XXXII. (Pl. II., Vol. XII.)

No.
1. Heliocopris hamadryas.
2. ,, pirmal.
3. ,, atropos.
4. ,, hamifer.

No.
5. Heliocopris eryx.
6. ,, antenor.
7. ,, gigas.
8. ,, japetus.

## Plate XXXIII. (Pl. III., Vol. XII.)

No.
1. Copris globulipennis.
2, 2*a*. Copris cornifrons.
3, 3*a*. Parapinotus dewitzi.
4, 4*a*. Copris contractus.
5, 5*a*. ,, bootes.
6. Catharsius opacus.
7. Copris meracanthus.
8. ,, victorini.

No.
9, 9*a*. Copris orphanus.
10, 10*a*, 10*b*. Copris urus.
11, 11*a*. Catharsius ulysses.
12, 12*a*. Copris jacchus, var.
17, 17*a*. ,, ,, ♂.
16, 16*a*. ,, ,, ♀.
15, 15*a*. ,, elphenor, ♀.
19, 19*a*. ,, ,, ♂.

No.
13, 13*a*. Catharsius tri-cornutus.
14, 14*a*. Copris anceus.
18. Copris laticornis.
20. Catharsius vitulus.
21, 21*a*. Catharsius melancholicus, ♂.
No.
22, 22*a*. Catharsius melancholicus, ♀.
23, 23*a*. ,, laticeps, ♂.
24, 24*a*. ,, ,, ♀.
25, 25*a*. ,, pylades, ♂.

## Plate XXXIV. (Pl. IV., Vol. XII.)

No.
1. Onitis bohemani, ♂.
1*a*. Fore leg of same.
2. Onitis paradoxus, ♀.
3. ,, castelnaui, ♀.
3*a*. Fore leg of same.
4. Onitis curvipes, hind leg.
4*a*. ,, ,, fore leg.
5. ,, confusus, fore tibia.
5*a*. ,, ,, hind femur.
6. ,, caffer, hind femur.
7. ,, robustus, intermediate leg.
8. ,, fabricii, intermediate leg.
9. ,, orthoptus, hind leg.
10, 10*a*. Onitis inversidens, fore tibiæ.
10*b*, 10*c*. ,, ,, hind femur.
11, 11*a*. ,, aygulus, fore leg and hind leg.
No.
12, 12*a*. Onitis sphinx, fore and hind legs
13. Onitis viridulus, hind femur.
14. ,, pecuarius, hind femur.
15, 15*a*. Onitis ærarius, intermediate and hind legs.
16. Cheironitis apelles, prosternal process.
17, 17*a*. Cheironitis hoplosternus, prosternal process.
18. Sisyphus muricatus, ♂.
19. ,, spinipes, ♂.
20. ,, rubripes, ♂.
21, 21*a*. Tragiscus dimidiatus, ♀.
21*b*. ,, ,, ♂.
22. Drepanocerus sulcicollis, ♂.
23. ,, kirbyi, ♂.
24. ,, laticollis, ♂.

## Plate XXXV. (Pl. V., Vol. XII.)

No.
1. Phalops ardea.
2. ,, flavocinctus.
4. ,, boschas.
5, 6. ,, adspersipennis.
7. Diastellopalpus quinquedens.
8. Onthophagus rangifer.
9. ,, furcifer.
10. ,, rarus.
11. ,, panoplus.
12. ,, pyramidalis.
13. ,, naso.
14. ,, ebenus.
15. ,, sub-extensus.
16. ,, lanista.
17. ,, insignis.
18. ,, loricatus.
19. ,, leucopygus.
20. ,, opimus.
21. ,, pugionatus.
22. ,, cretus.
No.
23. Onthophagus deterrens.
24. ,, impressicollis.
25. ,, obtusicornis.
26. ,, giraffa.
27. ,, alcyon.
28. ,, pilosus.
29. ,, quadrinodosus.
30. ,, parumnotatus.
31. ,, emeritus.
32. ,, gazella.
33. ,, bubalus.
34. ,, urus.
35. ,, bovinus.
36. ,, interstitialis.
37. ,, vitulus.
38. ,, merus.
39. ,, tenuicornis.
40. ,, intermedius.
41. ,, venustulus.

## Plate XXXVI. (Pl. VI., Vol. XII.)

No.
1. Onthophagus corniculatus.
2. ,, ambiguus.
3. ,, bi-plagiatus.
4. ,, exiguus.
5. ,, obtutus.
6. ,, plebejus.
7. ,, bicallosus.
8, 9. ,, crœsulus.
10. ,, columella.
11. ,, brucei.
12. ,, sapphirinus.
13. ,, suspectus.
14. ,, gemmeus.
15. ,, aciculatus.
16. Bolboceras capense, ♀.

No.
17. Bolboceras capense, ♂.
18. ,, spurium.
19. ,, damarinum.
20. ,, indubium.
21. ,, auspicatum.
22. ,, plausibile.
23. ,, fortuitum.
24. ,, caffrum.
25. ,, vacivum.
26. ,, consocium.
27. ,, panza.
28. ,, maculicolle.
29. Orphnus pugnax.
30. ,, zambesianum.
31. Onitis dispar, hind leg of.

## Plate XXXVII. (Pl. VII., Vol. XII.)

*Genital Armature of Male.*

No.
1. Pachylomera femoralis, left and right side view.
2. Scarabæus cuprescens.
3. ,, metallicus.
4. ,, usurpator.
5. ,, mashunus.
6. ,, intricatus.
7. ,, rubripennis.
8. ,, flavicornis.
9. ,, proximus.
10. ,, suri.
11. ,, viator.
12. ,, rugosus.
13. ,, ambiguus.
14. ,, funebris.
15. ,, hottentorum.
16. ,, savignyi.
17. ,, convexus.

No.
18. Scarabæus rusticus.
19. ,, ebenus.
20. ,, satyrus.
21. ,, profanus.
22. ,, zambesianus.
23. ,, modestus.
24. ,, infernalis.
25. ,, prodigiosus.
26. ,, bonelli.
27. ,, nigro-æneus.
28. Sebasteos galenus.
29. ,, caffer.
30. ,, laticeps.
31. Pachysoma hypocrates.
32. ,, æsculapius.
33. ,, marginatum.
34. ,, denticolle.
35. ,, adamastor.

## Plate XXXVIII. (Pl. VIII., Vol. XII.)

*Genital Armature of Male.*

No.
1. Circellium bacchus.
2. Gymnopleurus ignitus.
3. Anachalcos convexus.
4. Gyronotus marginatus.

No.
5. Gyronotus pumilus.
6. Onitis castelnaui.
7. ,, aygulus.
8. Cheironitis apelles.

No.
9. Drepanocerus impressicollis.
10. Scaptocnemis segregis.
11. Oniticellus planatus.
12. Epirinus sulcipennis.
13. Sisyphus fortuitus.
14. ,, rubripes.
15. ,, quadricollis.
16. ,, atratus.
17. ,, spinipes.
18. ,, fasciculatus.
19. ,, muricatus.
20. Diastellopalpus quinquedens.
21. Onthophagus bi-callosus.
22. ,, rarus.
23. ,, brucei.
24. ,, furcifer.

No.
25. Onthophagus lanista.
26. ,, sub-extensus.
27. Parapinotus dewitzi.
28. Macroderes greeni.
29. Pedaria cuprascens.
30. ,, costata.
31. Coptorhina klugi.
32. ,, nana.
33. Aphengœcus clypeatus.
34. Aphodius procerus.
35. Chiron puncticollis.
36. Orphnus zambesianus (closed).
37. ,, ,, (open).
38. Hybosorus ruficornis.
39. ,, illigeri.

## Plate XXXIX. (Pl. IX., Vol. XII.)

*Genital Armature of Male.*

No.
1. Phæocrous madagascariensis.
2. Bolboceras panza.
3. ,, auspicatum.
4. ,, capense.
5. ,, spurium.
6. ,, vacivum.
7. ,, fortuitum.
8. ,, plausibile.
9. ,, maculicolle.
10. Trox luridus.
11. ,, angulatus.
12. ,, penicillatus.
13. ,, fascicularis.
14. ,, rhyparoides.
15. ,, horridus.
16. ,, incultus.
17. ,, gravidus.
18. ,, ponderosus.
19. ,, tuberosus.
20. Neonitis porculus.

No.
21. Chætocanthus insuetus.
22. Aphengecus clypeatus.
23. Acanthocerodes singularis.
24. Heliocopris, Labial palpus of.
25. Copris, ,,
26. Parapinotus, ,,
27. Odontoloma, Maxillary palpus of.
28. Neonitis, Labial palpus of.
29. Cheironitis, ,,
30. Onitis, ,,
31. Heteroclitopus remipes, Hind leg of
32. Heliocopris hamadryas, Genital armature of.
33. ,, faunus, ,,
34. Catharsius heros, ,,
35. Copris globulipennis, ,,
36. ,, cassius, ,,
37. Catharsius ulysses, ,,
38. ,, pylades, ,,

## Plate XL. (Pl. X., Vol. XII.) *

*Genital Armature of Male.*

No.
1. Heteronychus claudius.
2. ,, licas.
3. ,, wilmsi.

No.
4. Heteronychus mashunus.
5. ,, arator.
6. ,, dissidens.

* The numbering of this plate in the text is partly erroneous.

No.
7. Heteronychus tristis.
8. ,, indotatus.
9. ,, transvaalensis.
10. ,, pauperatus.
11. ,, viator.
12. Pentodontoschema capicola.*
13. ,, aries.
14. ,, diversa.
15. ,, nirea.
16. ,, deceptor.
17. Hyboschema contracta.
18. ,, sobrina.
19. Temnorhynchus bubalus.
20. ,, faunus.
21. ,, clypeatus.
22. ,, retusus.
23. Pychnoschema diversa.
24. ,, corpulenta.

No.
25. Pychnoschema corydon.
26. Syrichthodontus spurius.
27. Pseudosyrichthus clathratus.
28. Syrichthus verus.
29. Callistemonus intrusus.
30. Oryctes monoceros.
31. ,, boas.
32. Rhizoplatys trituberculatus.
33. ,, bituberculatus.

*Mentum and Maxillary Palps of-*
34. Cyphonistes vallatus.
35. Pseudocyphonistes corniculatus.
36. Syrichthus verus.
37. Callistomenus.
38. Pychnoschema corydon.
39. Pentodontoschema capicola.

## Plate XLI. (Pl. XI., Vol. XII.)

*Genital Armature of Male.*

No.
1. Adoretus capicola.
2. ,, fallaciosus.
3. ,, incongruens.
4. ,, punctipennis.
5. ,, hoplioides.
6. ,, plumbicollis.
7. ,, ictericus.
8. ,, ovampoensis.
9. ,, fusculus.
10. ,, mashunus.
11. ,, variegatus.
12. ,, laticeps.
13. ,, fraudulentus.
14. ,, ovatus.
15. ,, impurus.
16. ,, exasperans.
17. ,, fraudator.
18. ,, dissidens.
19. ,, cribrosus.
20. ,, tessulatus.
21. ,, bechuanus.
22. ,, picticollis.
23. ,, inglorius.
24. ,, flaveolus.
25. ,, curtulus.

No.
26. Anomala vestita.
27. ,, vetula.
28. ,, bohemani.
29. ,, damara.
30. ,, exoleta.
31. ,, exitialis.
32. ,, immatura.
33. ,, zambesicola.
34. ,, repensa.
35. ,, transvaalensis.
36. ,, pinguis.
37. ,, probativa.
38. ,, intrusa.
39. ,, tolerata.
40. ,, phthysica.
41. ,, dita.
42. ,, caffra.
43. ,, resplendens.
44. ,, castanea.
45. ,, fuscipes.
46. ,, dorsata.
47. ,, delagoa.
48. Peripopillia basalis.
49. Popillia bipunctata.
50. ,, major.

* The sheaths of the penis are more slender than those of fig. 13, but they should be likewise angular laterally towards the median part.

No.
51. Pharaonus subvittatus.
52. Schizonycha neglecta.
53. ,, transvaalica.
54. ,, meracula.
55. ,, infantilis.
56. ,, fragilis.
57. ,, dubiosa.
58. ,, tumida.
59. ,, saga.
60, 61. ,, furva.
62. ,, infans.
63. ,, languens.
64. ,, mediastina.
65. ,, puerilis.
66. ,, perfidiosa.
67. ,, immixta.
68. ,, insuesa.

No.
69. Schizonycha disputabilis.
70. ,, minima.
71. ,, natalensis.
72. ,, manicana.
73. ,, rufina.
74. ,, spuria.
75. ,, constrata.
76. ,, rurigena.
77. ,, increta.
78. Entyposis mendax.
79. Schizonycha divulsa.
80. ,, continens.
81. ,, zambesiana.
82. ,, plausibilis.
83. ,, algoensis.
84. ,, profuga.

## Plate XLII. (Pl. XII., Vol. XII.)

No.
1. Hoplocnemis koikoina.
2. ,, hylax.
3. ,, crassipes.
4. ,, auriventris.
5. ,, armata.
6. ,, mutica.
7. ,, fuliginosa.
8. Pachycnema striata.
9. ,, squamosa.
10. ,, morbillosa.
11. ,, signatipennis.
12. ,, calcarata.
13. ,, flavolineata.
14. ,, singularis.
15. ,, lineola.
16. ,, marginella.
17. ,, rostrata.
18. ,, obscurepurpurea.
19. Heterochelus chiragricus.
20. ,, detritus.
21. ,, podagricus.
22. ,, unguiculatus.
23. Dichelus dentipes.
24. ,, expansus.
25. ,, denticeps.
26, 48. ,, acanthopus.

No.
27. Dichelus holosericeus.
28. ,, simplicipes.
29. Heterochelus vulpinus.
30. ,, armipes.
31. ,, multidentatus.
32. Dichelus laticollis.
33. Heterochelus fraternus.
34. ,, arthriticus.
35. ,, longipes.
36. ,, capicola.
37. ,, natalensis.
38. ,, longulus.
39. ,, ditus.
40. ,, miserabilis.
41. ,, leoninus.
42. ,, coccineus.*
43. ,, placatus.
44. ,, sexlineatus.
45. ,, armatus.
46. ,, forcipatus.
47. ,, pachyglutus.
49. ,, dissidens.
50. ,, elegans.
51. Monochelus spinipes.
52. ,, aurantiacus.
53. ,, glaberrimus.

* This figure is not quite correct.

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